HONI SOIT QUI MAL Y PENSE
DIEU ET MON DROIT

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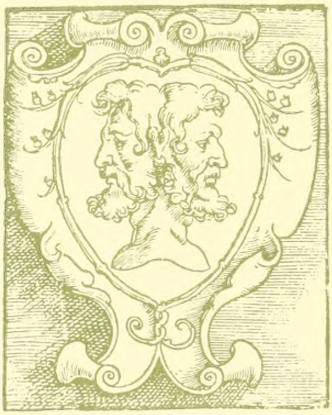

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TABLES

OF

LIFETIMES, ANNUITIES, AND PREMIUMS.

FIRST APPLICATIO
OF COMPUTER TO
MEDICAL STATISTICS

RE SCHEUTZ
MACHINE SEE pp. CXX
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ENGLISH LIFE TABLE.

TABLES
OF
LIFETIMES, ANNUITIES, AND PREMIUMS.

WITH
AN INTRODUCTION
BY
WILLIAM FARR, M.D., F.R.S., D.C.L.

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LETTER to the REGISTRAR GENERAL.

SIR,

I BEG to lay before you some observations on the new English Life Table, which has been calculated at this office, from the returns of two Censuses, and 6,470,720 deaths registered in 17 years.

The Tables are so constructed as to show the value of annuities on the life of a male or of a female ; and on *two lives*,—namely, two males ; two females ; one male and one female,—at all the various combinations of age.

From the given logarithms of all the combinations of $D_{x,\,y,}$ and the logarithms of l_x and l_y, the values of annuities and insurances on three lives, or on any number of lives, of various ages, are readily deducible.

Several of the series were calculated by Scheutz's machine, which, at your instance, Her Majesty's Government purchased*; and thus encouraged the inventors, while it gave us an opportunity of testing its working powers in England, where Mr. Babbage explained the principles, and first demonstrated the practicability of performing certain calculations, and printing the results by machinery.

These Tables will, I trust, be found useful in exhibiting the probabilities of English life ; and the values of money depending upon its duration under a great variety of circumstances. They are particularly applicable to Life Insurance, and may be used by liberal companies with confidence.

The public can also learn the mathematical values of sums insured, and the premiums for which they can be provided ; due additions being allowed for expenses of management, and for contingencies.

The various assets and liabilities of Insurance Companies can be valued satisfactorily by the general and subsidiary Tables.

I have the honour to be,
Sir,
Your obedient Servant,
W. FARR.

1864.

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* The machine at the General Register Office was manufactured by the Messrs. Donkin.

PART I.—CONSTRUCTION OF THE ENGLISH LIFE TABLE No. 3.

This Life Table is based upon the observed *rates of mortality* at different ages in England and Wales.

The Annual Rate of Mortality.

The rate of mortality—or, in a technical sense, the mortality—expresses the ratio between three elements : (1) men living ; (2) time ; and (3) men dying.

The men living, and the *time expressed in years,* multiplied into each other, produce the years of life with which the deaths are compared. A *year of life* is the lifetime unit. It is represented by one person living through a year. Any number of persons living, one at a time, *in continuous succession* through a year, yield also one year of life. There are 525,949 minutes in a year; and 525,949 persons living through one minute also enjoy *one year* of life.

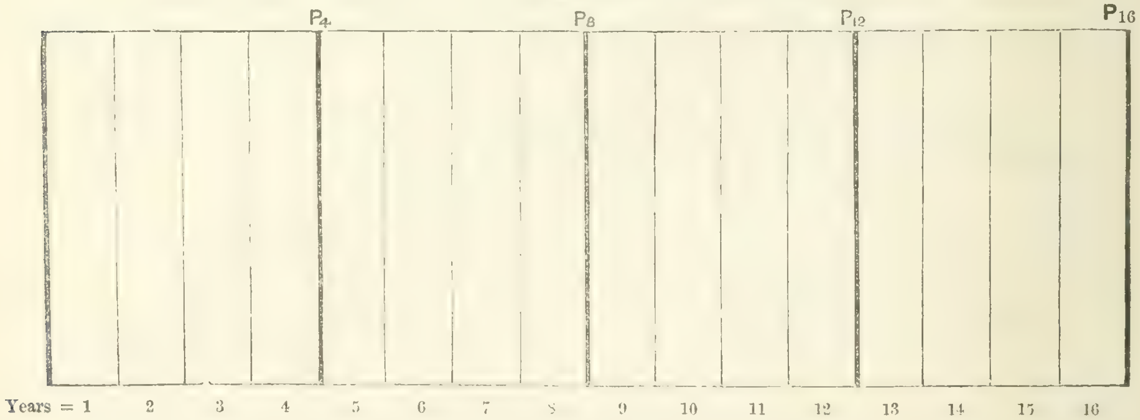
The years of life are determined by enumerating the population at certain points of time, and thence deducing the numbers living through the time.

The following four cases may be distinguished:—

1. The population is known or is assumed to be *stationary.* Thus a population of *ten thousand* living through *two years*, yields *twenty thousand years of life* Let the population be P, and the years of life y ; then in x *years,* $y = x$P in all these cases. Here x may be an integer or a fraction.

2. The population increases by equal numbers in equal times; that is, it increases in *arithmetical progression.* If the population is 4,000 at the beginning,

DIAGRAM 1.—STATIONARY POPULATION.

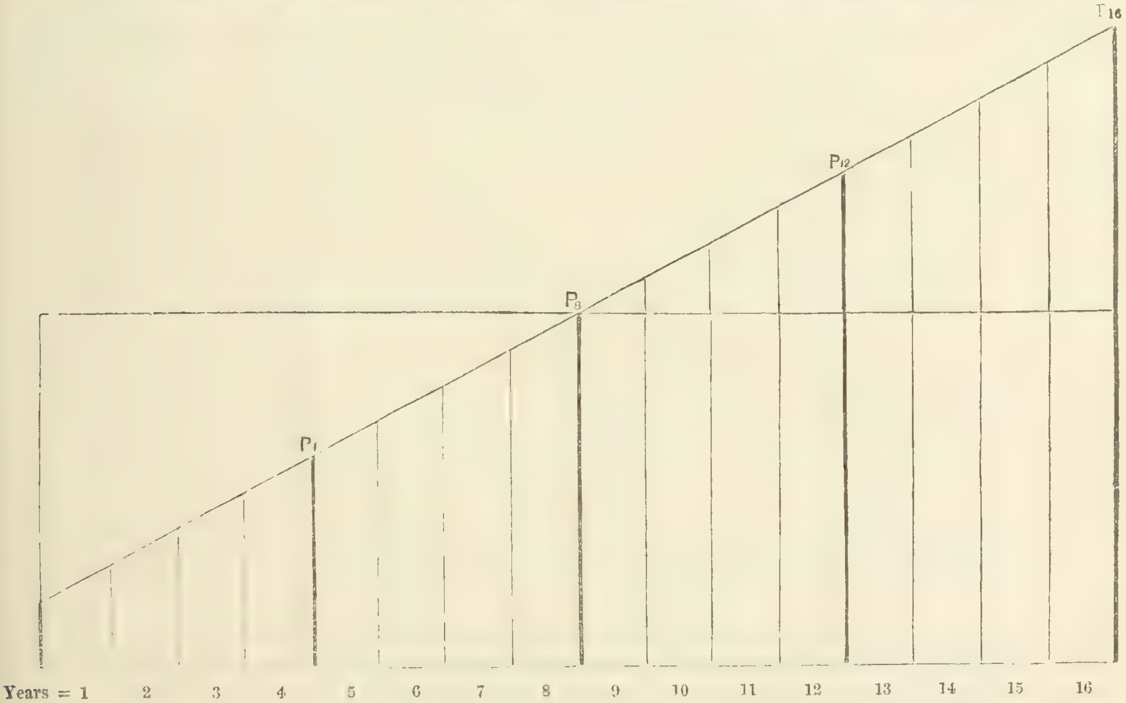


Represents a stationary population by the vertical lines, which remain of the same length.
Population stationary = P_n = 5·41, and n = 16 : so 5·41 × 16 = 86·56 years of life = y_n.

and 6,000 at the end of a period, the mean population will be the sum of these numbers divided by 2, that is, 5,000; which will also be the population in the middle of the period. 5,000 multiplied by the intervening years gives the years of life. Thus if P_0 is the population at the beginning, and P_x the population at the end of x years; $r = \frac{P_x - P_0}{x} =$ *annual* increase; for the increase (r) is equal in equal times by hypothesis. The population at the end of any time is $P_x = P_0 + rx$. And $dy = P_0\,dx + rx dx$ is the differential of the lifetime, from which we have by integration $y_x = x\,P_0 + r\frac{x^2}{2} =$ the years of life = the population in the middle of the period $P_0 + r\frac{x}{2}$ multiplied by the years x over which the observation extends.

3. If the population fluctuates much, and frequent enumerations are made, the mean of each successive couple of enumerations, multiplied by the time, expressed in years and fractions of a year, will give nearly the years of life. When the numbers at the beginning and at n equal intervals of time are ascertained, the half of the extremes added to the intermediate terms makes a sum which, divided by one less than the number ($n + 1$) of enumerations, gives the mean population.

DIAGRAM 2.—POPULATION increasing in ARITHMETICAL PROGRESSION.



Represents a population increasing in arithmetical progression.

Mean of population at beginning and end of period, $\frac{(1 + 9 \cdot 82)}{2} = 5 \cdot 41 =$ population in middle of period, and $5 \cdot 41 \times 16 = 86 \cdot 56$ years of life $= y_n$.

Annual increase, 0·55.

So $y_x = \frac{x}{n}(\frac{1}{2}P_0 + P_1 + P_2 \ldots + \frac{1}{2}P_n)$ = years of life. Or, by Simpson's rule,

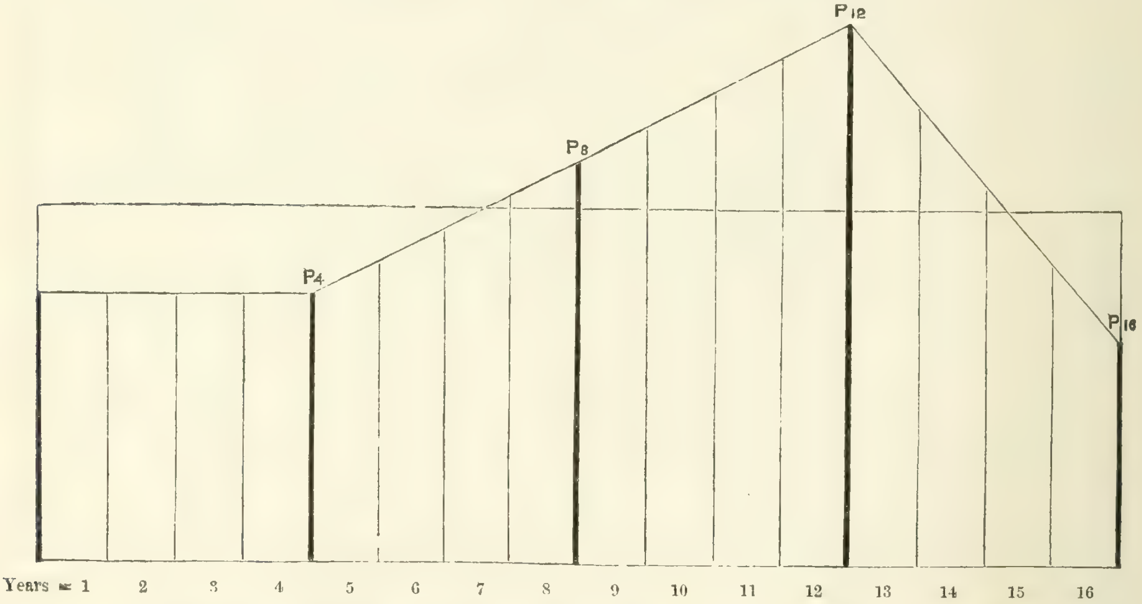
$$y_x = \frac{x}{3n}\left\{P_0 + 4(P_1 + P_3 + P_5 \ldots\ldots) + 2(P_2 + P_4 + P_6 \ldots\ldots) + P_n\right\};$$

x being the time in years.

4. The population of a country naturally increases in equal proportions in equal times, or in geometrical progression; for this is a necessary result if the increase also increases. Thus, let a population represented by 1 become $1 + i$ in the first year; then $1 : 1 + i :: 1 + i : (1 + i)(1 + i) = 1 + 2i + i^2$. Thus the increment of $(1 + i)$ is $i + i^2$; the i growing out of the population represented by 1, and i^2 growing out of the population represented by i. The population in two successive equal intervals of time will be in the ratio $1 : 1 + i : 1 + 2i + i^2$; and the arithmetical mean of the first term and the third term $= 1 + i + \frac{i^2}{2}$; which in a short time, or when i is a small fraction, differs inappreciably from the middle term $(1 + i)$, for the $\frac{i^2}{2}$ may be neglected. And so it is if the mean of several terms is taken. The result, therefore, in such cases, differs little from the result which is obtained under the second head.

The population increases naturally, so that if the lines representing it are drawn at short equal intervals, they will touch a regular curve. Thus, let the population

DIAGRAM 3.—FLUCTUATING POPULATION.

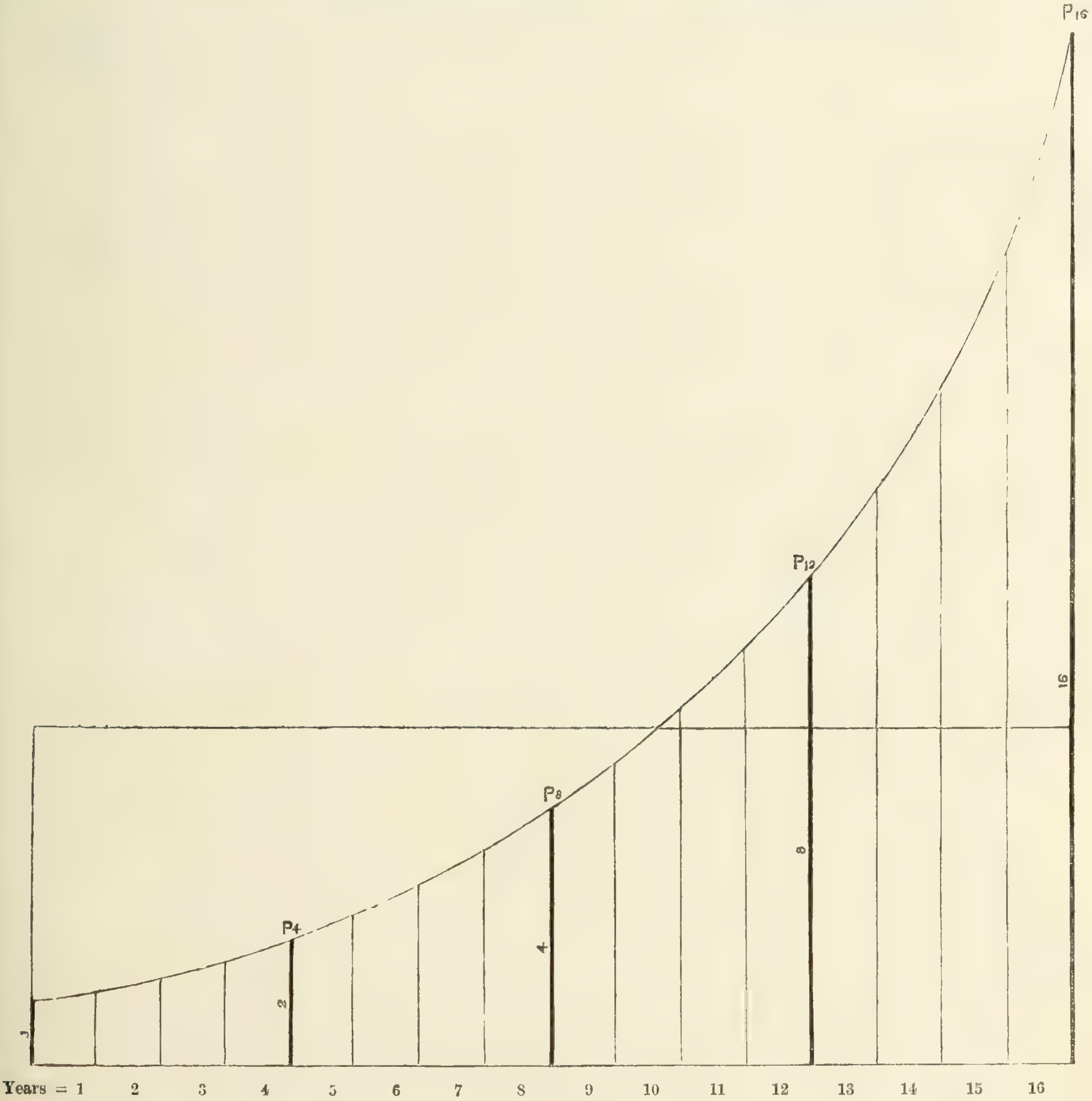


Represents a fluctuating population, found to be 4, 4, 6, 8, and 3·28 at five equidistant enumerations.

Here the mean population $= \frac{(\frac{4}{2} + 4 + 6 + 8 + \frac{3\cdot28}{2})}{4} = \frac{(21\cdot64)}{4} = 5\cdot41$ = mean population, and $5\cdot41 \times 16 = 86\cdot56$ years of life $= y_x$.

be conceived as standing on a straight line at the beginning of the year, and passing at a uniform rate through the year; as the population is increasing incessantly, its line of march will be constantly extending; then, if the ground that it passes over in the first year be represented by the area marked 1 year in the diagram, the ground that it passes over, at the same rate of progress, in the second year will

DIAGRAM 4.—POPULATION increasing in GEOMETRICAL PROGRESSION.



The vertical lines (*ordinates*) represent a population increasing in the same proportion in the same time, or in geometrical progression; the base line (*abscissa*) represents the flowing time; the space enclosed by the lines represents the lifetime.

P_x = population in each year.

n = 16 years during which the deaths in the population have been recorded.

y_n = 86·56 = years of life represented by area.

Annual rate of increase, 18·92 per cent. $r = 1 + i = 1 + \cdot 1892$; and $P_0 = 1$; $P_4 = 2$; $P_{16} = 16$.

be represented by the area marked 2 years; and so, as the line of march extends, the covered area will increase every year. The ordinate represents the *population*; the base line—abscissa—represents the *time* in years; the area represents the *years of life*. Put the population $y = P_0\, r^x$ at any given moment; then in the next moment it will be $y + dy$, where dy represents the increase of y in the infinitely short time dx; and the mean of these two quantities $y = \frac{2y + dy}{2} = y + \frac{dy}{2}$, which, multiplied by the interval of time (dx) is $= ydx + dy\, dx$; or passing to the limit $= ydx$, which is, as we know, $= P_0\, r^x\, dx$. Such is the amount of lifetime generated in an instant, and represented by the extension of area of which it is the differential. The sum of all the years of lifetime enjoyed in the x years is given by the definite integral $y_x = P_0 \int_0^x r^x\, dx = \frac{k\, P_0}{\lambda\, r}(r^x - 1) =$ the years of life: $r = 1 + i$, being the assumed ratio of increase, $\lambda\, r$ its logarithm, k the modulus of the common logarithm, P_0 the population at the beginning of the period, and x the time in years.

$$\lambda\, y_x = \lambda\, P_0 + \lambda\, k + \kappa\, (\lambda\, r) + \lambda\, (r^x - 1)$$

$$\lambda\, y_{17} = \lambda\, P_0 + \lambda\, k + \kappa\, (\lambda\, r) + \lambda\, (r^{17} - 1)$$

Here in the expression $\kappa\, (\lambda\, r)$, the quantity $(\lambda\, r)$ is treated as a number, and $\kappa\, (\lambda\, r)$ is the complement of the logarithm of that number. In dealing with the English population—determined for the middle of the years 1841 and 1851 from two enumerations—the population was carried back to the beginning of the year 1838 by the formula; $P_0 = \lambda\, P_{3\frac{1}{2}} - 3\frac{1}{2}\, \lambda\, r$. Here P_0 is the population at the beginning of 1838; $\lambda\, r$ is the logarithm of the rate of increase deduced from P_{41} the population of 1841, and P_{51} the population of 1851; thus $\lambda\, r = \frac{\lambda\, P_{51} - \lambda\, P_{41}}{10}$; and $P_{3\frac{1}{2}}$ stands for the population of 1841. The years of lifetime enjoyed by males and females during the 17 years 1838 to 1854 were deduced separately for each of twelve ages by the formula.

TABLE I.—POPULATION of ENGLAND and WALES estimated to the Middle of the Years 1841 and 1851.

AGES.	PERSONS.		MALES.		FEMALES.	
	1841.	1851.	1841.	1851.	1841.	1851.
All Ages -	15,929,492	17,982,849	7,784,883	8,808,662	8,144,609	9,174,187
0 —	2,107,008	2,355,345	1,048,270	1,180,430	1,058,738	1,174,915
5 —	1,865,856	2,098,808	953,235	1,053,510	912,621	1,045,298
10 —	1,772,913	1,919,255	880,567	967,007	892,346	952,248
15 —	3,145,541	3,418,488	1,511,602	1,671,634	1,633,939	1,746,854
25 —	2,450,322	2,740,919	1,174,473	1,323,621	1,275,849	1,417,298
35 —	1,778,737	2,089,629	875,874	1,017,018	902,863	1,072,611
45 —	1,270,178	1,516,324	617,113	734,314	653,065	782,010
55 —	832,692	1,010,973	399,490	482,788	433,202	528,185
65 —	483,593	579,187	224,310	268,052	259,283	311,135
75 —	190,443	220,618	86,736	97,008	103,707	123,610
85 —	30,541	31,754	12,635	12,745	17,906	19,009
95 and upwards	1,668	1,549	578	535	1,090	1,014

Note.—The Ages are read thus: 0 and under 5, 5 and under 10, 10 and under 15, &c.

The number $\frac{y_x}{x} = P_0 =$ the stationary population, which in x years would enjoy the years of life y_x. It is evident from the nature of the curve that $\frac{y_x}{x}$ represents the mean length of an infinite number of ordinates, drawn at equidistant points of the abscissa, and that while it is less than the arithmetical mean of the first and last ordinates of the series, it is greater than the geometrical mean proportional, that is, greater than the middle ordinate; so that the true mean population, which multiplied by n is equal to the years of life, is less than the mean of the populations living at the beginning and end; more than the population living in the middle, of the period.

The division of the average annual deaths by the arithmetical mean population of the extremes, understates the mortality $\left(\frac{d}{P} = m\right)$, which varies inversely as the

TABLE II.—DEATHS registered in ENGLAND and WALES in the 17 Years 1838–54.

AGES.	PERSONS.	MALES.	FEMALES.
All Ages -	6,470,720	3,283,255	3,187,465
0–	2,555,659	1,373,318	1,182,341
5–	308,596	157,004	151,592
10–	165,477	81,111	84,366
15–	467,406	222,420	244,986
25–	453,575	212,063	241,512
35–	419,699	206,424	213,275
45–	406,171	212,644	193,527
55–	468,814	238,699	230,115
65–	570,736	279,894	290,842
75–	490,078	230,486	259,592
85–	152,614	65,027	87,587
95 and upwards	11,895	4,165	7,730

TABLE III.—ENGLAND and WALES. LOGARITHMS of (1) YEARS OF LIFE, (2) DEATHS, and (3) AVERAGE ANNUAL RATE OF MORTALITY of MALES and FEMALES AT DIFFERENT AGES in the 17 Years 1838–54.

Ages.	LOGARITHMS of the YEARS of LIFE.		LOGARITHMS of the DEATHS.		LOGARITHMS of the AVERAGE ANNUAL RATE of MORTALITY.	
	λy_x		$\lambda 17 d_x$		λm	
	MALES.	FEMALES.	MALES.	FEMALES.	MALES.	FEMALES.
0–	7·2774449	7·2784078	6·1377714	6·0727429	$\bar{2}$·8603265	$\bar{2}$·7943351
5–	7·2318934	7·2211795	5·1959109	5·1806772	$\bar{3}$·9640175	$\bar{3}$·9594977
10–	7·1960112	7·1952993	4·9090815	4·9261659	$\bar{3}$·7130703	$\bar{3}$·7308666
15–	7·4322693	7·4584160	5·3471730	5·3891406	$\bar{3}$·9149037	$\bar{3}$·9307246
25–	7·3270081	7·3596600	5·3264641	5·3829390	$\bar{3}$·9994560	$\bar{2}$·0232790
35–	7·2064960	7·2250316	5·3147606	5·3289395	$\bar{2}$·1082646	$\bar{2}$·1039079
45–	7·0601560	7·0862257	5·3276527	5·2867423	$\bar{2}$·2674967	$\bar{2}$·2005166
55–	6·8749504	6·9122425	5·3778498	5·3619458	$\bar{2}$·5028994	$\bar{2}$·4497033
65–	6·6216404	6·6855482	5·4469936	5·4636567	$\bar{2}$·8253532	$\bar{2}$·7781085
75–	6·1936129	6·2859938	5·3626444	5·4142921	$\bar{1}$·1690315	$\bar{1}$·1282983
85–	5·3340032	5·4965965	4·8130919	4·9424389	$\bar{1}$·4790887	$\bar{1}$·4458424
95 and upwards	3·9759058	4·2524671	3·6196607	3·8881772	$\bar{1}$·6437549	$\bar{1}$·6357101

population. For the same reason the division by the population living in the middle of the period overstates the mortality. The shorter the period the less is the error; indeed the two values approximate indefinitely as the period is shortened, and as the ratio (r) recedes to unity. Either divisor may be employed where great precision is unattainable, or is not required.

The mean population existing at the two points equidistant from the two extremes—in 1841 and in 1851—is near the true mean population living through the 17 years 1838–54. By taking these years the error in the years of life is reduced to a minimum.

Thus the mean population of the age 15–25 was by the different methods:—

MALES:—

$\frac{y_{17}}{17}$ = 1,591,550 = true mean population, on the hypothesis that the population increased in geometrical progression at a uniform rate.

$\frac{P_{41} + P_{51}}{2}$ = 1,591,618 = arithmetical mean of the population living in 1841 and 1851.

$\frac{P_0 + P_{17}}{2}$ = 1,595,424 = arithmetical mean of the population living at the beginning and end of the 17 years.

$r^{8\frac{1}{2}} P_0$ = 1,589,606 = population living in the middle of the period.

The annual rate of mortality is determined for the several periods of life by dividing the deaths at each age by the contemporaneous years of life out of which they occur. If P represents the years of life enjoyed by men of the age 20 and under 30, and d the corresponding deaths, then $\frac{d}{P} = m$ = the annual rate of mortality among the men of that age. $100\,m$ = the annual rate *per cent.*

TABLE IV.—AVERAGE ANNUAL RATE of MORTALITY in ENGLAND and WALES in the 17 Years 1838–54.

AGES.	PERSONS.	MALES.	FEMALES.
All Ages -	·02245	·02328	·02165
0–	·06738	·07250	·06228
5–	·00916	·00920	·00911
10–	·00527	·00517	·00538
15–	·00838	·00822	·00853
25–	·01028	·00999	·01055
35–	·01277	·01283	·01270
45–	·01715	·01851	·01587
55–	·02992	·03183	·02816
65–	·06319	·06689	·05999
75–	·14027	·14758	·13437
85–	·28820	·30136	·27915
95 and upwards	·43501	·44031	·43223

The rate of mortality at each age is thus deduced from the deaths registered at that age, and from the population of corresponding ages enumerated at the Censuses. Now it is generally admitted that the ages of a certain number of women are understated; and I had to consider what correction was necessary upon this ground.

The probable extent of the error in the statements of women's ages it was shown, in the Census Report for 1851, is not considerable; but as the effect of the error is not always understood, some explanation is necessary.

The English Life Table is not deduced from the population or from the deaths alone, but from the ratio the one bears to the other at different ages; and to display the effect of transfers from one age to the other, assume that the following numbers represent the exact numbers living and dying at the three ages 25, 35, and 45.

Age.	Females.		Annual Rate of Mortality.
	Living.	Dying in a Year.	
(x)	P_x.	d_x.	m_x.
25	313,095	3,024	·00966
35	281,506	3,279	·01165
45	247,434	3,555	·01437

The mortality, it will be observed, increases as age advances; so that if all the women of 35 were returned as ten years younger than they are, the mortality at the

TABLE V.—ANNUAL DECREMENTS in the first 5 Years of Life.

—	BIRTHS.*		—
	MALES.	FEMALES.	
17 Years. 1837½–53½	4,973,401	4,745,485	17 Years. 1837½–53½
AGES.	DEATHS.		YEARS.
Years.			
0 – 1	813,626	639,276	1838–54
1 – 2	267,463	254,246	1839–55
2 – 3	138,151	136,290	1840–56
3 – 4	89,534	89,834	1841–57
4 – 5	65,301	64,110	1842–58

* Corrected for estimated Number of Births unregistered.

Note.—The Deaths are the successive annual decrements of the Births of which the Number is given in the first line of figures in the Table, which may be read thus—Out of 4,973,401 boys born at the same time, 813,626 die in the first year of life, 267,463 in the second, and so on. From these facts the survivors over each of the 1st, 2d, 3d, 4th, and 5th years of life were calculated as given in the Male Life Table. These results were compared with those deducible from the mortality rate at age 0–5.

age 25 would be overstated; the excess being ·00199. But there is less chance of women of 35 at death being returned as 25 than there is of their being so returned at the Census; and the corrective effect of this excess in the proportion of women at the Census transferred to the earlier ages is apparent, on inspection of the formulas below. d represents the deaths, P the population, m the mortality, and r^{10} the increase of the rate of mortality between the ages 25 and 35. Thus $\frac{d_{25}}{P_{25}} = m_{25}$; $\frac{d_{35}}{P_{35}} = r^{10} m_{25}$, $\therefore \frac{d_{35}}{r^{10} P_{35}} = m_{25} = \frac{r^{-2} d_{35}}{r^{8} P_{35}} = m_{25}$. It is evident that an increase in the population and a decrease in the relative deaths transferred from 35 to 25 might reduce the error to insignificance. From the numbers living at several periods of age a series representing the numbers living at each year of age was obtained by the method of finite differences; and from these numbers again the living at the ages 25–35, 35–45, ... were obtained. The residuary errors affecting the values m_x are, it is believed, inconsiderable.*

Upon comparing the female rates of mortality with those of males, and the rates of progression in the mortality of the two sexes, I have come to the conclusion, after carefully weighing the facts, that this correction is adequate; that the rates of mortality represent very nearly the mortality of the female population; and that the probabilities of female life, deducible from the mortality, are substantively true.

The rates of female mortality are in singular accordance with those deducible from observations on males; the mortality of females being slightly higher at the ages 10 to 35 than the mortality of males at home in England.

TABLE VI.—DEATHS registered in ENGLAND and WALES in the 17 Years 1838–54, under One Year of Age.

AGES.	PERSONS.	MALES.	FEMALES.
Months.			
0–	451,952	260,333	191,619
1–	167,118	93,688	73,430
2–	118,363	65,679	52,684
0–3	737,433	419,700	317,733
3–6	278,763	155,124	123,639
6–12	436,706	238,802	197,904
TOTAL under One Year of Age	1,452,902	813,626	639,276

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* See Census Reports, 1851 and 1861.

The Probability of living a Year after any age x

Let m = the annual rate of mortality at the precise age x. The mortality at the age 20 = m is represented by the mortality ruling from the age $19\frac{1}{2}$ to $20\frac{1}{2}$. Put r = the rate at which the *rate of mortality increases* or decreases, then $\lambda\, p_x = \frac{k^2 m}{\lambda\, r}(1 - r)$. Here k is the modulus of the common logarithm ; and $\lambda\, r$ is the common logarithm of r ; while p_x is the probability of living a year after the age x, and $\lambda\, p_x$ is its common logarithm ; $\kappa\ (\lambda\ r)$ is the complement of the

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TABLE VII.—LIFE TABLE for EACH MONTH of the FIRST YEAR of Age.

Age.	**Living** at 0 and at the end of each Month of Age.			**Deaths** in each Month of Age.		
	$l_{\frac{x}{12}}$			$d_{\frac{x}{12}}$		
x (Months.)	PERSONS.	MALES.	FEMALES.	PERSONS.	MALES.	FEMALES.
0	1,000,000	511,745	488,255	46,503	26,787	19,716
1	953,497	484,958	468,539	17,195	9,640	7,555
2	936,302	475,318	460,984	12,178	6,758	5,420
3	924,124	468,560	455,564	10,100	5,598	4,502
4	914,024	462,962	451,062	9,550	5,320	4,230
5	904,474	457,642	446,832	9,033	5,044	3,989
6	895,441	452,598	442,843	8,547	4,771	3,776
7	886,894	447,827	439,067	8,087	4,498	3,589
8	878,807	443,329	435,478	7,657	4,229	3,428
9	871,150	439,100	432,050	7,253	3,959	3,294
10	863,897	435,141	428,756	6,872	3,691	3,181
11	857,025	431,450	425,575	6,518	3,424	3,094
12	850,507	428,026	422,481	—	—	—

This Table was calculated from the corrected Births (Table V.) and from the Deaths under 1 year of age (Table VI.) Of 1,000,000 Children born, 953,497 were living at the end of the first month of age, 46,503 having died in the interval, of whom 26,787 were Males and 19,716 were Females ; 936,302 were living at the end of the second month, and the deaths in that month were 17,195, of whom 9,640 were Males and 7,555 were Females.

Note.—In determining the decrements of life in the *first year* for FEMALES two series of observations have been used.

The first series extends over 17 years (1838–54), and represents the deaths at three periods of age under 1 year; viz., 317,733 under 3 months, 123,639 at 3 and under 6 months, and 197,904 at 6 months and under 1 year.

In apportioning the deaths at 0 and under 1 month, 1 and under 2 months, and 2 and under 3 months for the Life Table, the 317,733 deaths under 3 months were proportionally distributed by means of the deaths in each of the first three months of age abstracted for 8 years (1839–46) : the results obtained were 191,619 deaths at 0 – 1 month, 73,430 at 1 – 2 months, and 52,684 at 2 and under 3 months.

By subtracting the deaths (317,733, 123,639, and 197,904) thus obtained for the 17 years 1838–54 successively from the Total Births for the 17 years $1837\frac{1}{2}$–$1853\frac{1}{2}$ (= 4,745,485), the numbers living at 0 – 3, 3 – 6, 6 – 12, and 12 months are ascertained. The logarithms of these numbers living ($\lambda\, l_{\frac{3}{12}}$, $\lambda\, l_{\frac{6}{12}}$, $\lambda\, l_1$, and $\lambda\, l_{1\frac{1}{4}}$) were used to interpolate the numbers living at 9 months (= $\lambda\, l_{\frac{9}{12}}$); then starting with the basis of the Female Life Table ($\lambda = 5\cdot6886465$) at age 0, the numbers living (l_x) were obtained at 3, 6, and 9 months by applying the logarithms inserted in the Quarterly Life Table.

To obtain the deaths in each of the first three months of life, where the observations only extended over a period of 8 years (1839–46), the 317,733 deaths in the 17 years 1838–54 under 3 months of age have been proportionally distributed from the observations for the said 8 years, 1839–46, and subsequently by interpolation the numbers living at each month under 1 year of age were obtained.

The decrements of life in the *first year* for MALES were determined in a precisely similar manner.

logarithm of $(\lambda\ r)$. If the operation be by logarithms, $\lambda\,(\lambda\,p_x) = \lambda\,k^2 + \lambda\,m + \kappa\,(\lambda\,r) + \lambda\,(1-r) =$ the logarithm of $(\lambda\ p_x)$; from which the logarithm of p_x and p_x itself are immediately found.

Example.—*Females.*—Age 20 :—

$$\begin{aligned}
\lambda\,k^2 &= \bar{1}\cdot 2755686 \\
\lambda\,m_{20} &= \bar{3}\cdot 9307246 \\
\kappa\,(\lambda\,r) &= 2\cdot 0336048 \\
\lambda\,(1-r) &= \underline{\bar{2}\cdot 3324385} \\
\lambda\,(\lambda\,p_{20}) &= \bar{3}\cdot 5723365 \\
\lambda\,p_{20} &= -\cdot 0037354 = \bar{1}\cdot 9962646,\ \text{and}\ p_{20} = \cdot 99144.
\end{aligned}$$

In some cases the following formula is applicable:—$p_x = \dfrac{1-\frac{1}{2}m}{1+\frac{1}{2}m} = \dfrac{2-m}{2+m}$; and when the m is a small quantity, the resulting p_x is nearly identical with that obtained by the other method.

The values p_0, p_1, p_2, p_3, p_4, were obtained from the deaths out of the births, and out of the numbers attaining the ages 1, 2, 3, 4.

The Table (VII.) shows the number of children surviving in each month of the first year.

Table VIII.—The several Values of $\lambda\,p_x$ on which the ENGLISH LIFE TABLE No. 3. is based; also the corresponding Values of p_x and of $1-p_x$.

Age	Logarithms of the Probability of Living One Year after the Age x.		Probability of Living a Year.		Probability of Dying in a Year.	
	λp_x		p_x		$\mu_x = 1 - p_x$	
(x)	Males.	Females.	Males.	Females.	Males.	Females.
0	$\bar{1}\cdot9224164$	$\bar{1}\cdot9371604$	·83640	·86529	·16360	·13471
1	$\bar{1}\cdot9711377$	$\bar{1}\cdot9722410$	·93570	·93808	·06430	·06192
2	$\bar{1}\cdot9843053$	$\bar{1}\cdot9843554$	·96451	·96462	·03549	·03538
3	$\bar{1}\cdot9895169$	$\bar{1}\cdot9893710$	·97615	·97582	·02385	·02418
4	$\bar{1}\cdot9921913$	$\bar{1}\cdot9922523$	·98218	·98232	·01782	·01768
7	$\bar{1}\cdot9960044$	$\bar{1}\cdot9960392$	·99084	·99092	·00916	·00908
12	$\bar{1}\cdot9979241$	$\bar{1}\cdot9977764$	·99523	·99489	·00477	·00511
20	$\bar{1}\cdot9963874$	$\bar{1}\cdot9962646$	·99172	·99144	·00828	·00856
30	$\bar{1}\cdot9956026$	$\bar{1}\cdot9953847$	·98993	·98943	·01007	·01057
40	$\bar{1}\cdot9943309$	$\bar{1}\cdot9944199$	·98703	·98723	·01297	·01277
50	$\bar{1}\cdot9917376$	$\bar{1}\cdot9929018$	·98116	·98379	·01884	·01621
60	$\bar{1}\cdot9856433$	$\bar{1}\cdot9872859$	·96748	·97115	·03252	·02885
70	$\bar{1}\cdot9697520$	$\bar{1}\cdot9728573$	·93272	·93941	·06728	·06059
80	$\bar{1}\cdot9335660$	$\bar{1}\cdot9394234$	·85816	·86981	·14184	·13019
90	$\bar{1}\cdot8667581$	$\bar{1}\cdot8760443$	·73580	·75170	·26420	·24830

Note.—Age x is in this Table the precise age. Age 12 is applied frequently to all persons of the age of 12 and under the age of 13; but in this Table it applies only to persons of the precise age of 12 years, neither more nor less. The λp_7 was in both cases derived from the formula $\left(\frac{2-m}{2+m}\right)$. The λp_{12}, deduced from this formula, is for males $\bar{1}\cdot9989608$, and for females $\bar{1}\cdot9988868$; which may be regarded either as the constant or the mean values of λp_{10}, λp_{11}, λp_{12}, λp_{13}, and λp_{14}; but as these are the terminations of an ascending and a descending series, it is probable, and quite in conformity with other observations, that one, two, or more of these values will exceed the mean value. The logarithms of p_{12} adopted are given above. The mean yearly deaths at the ages 10–15 in England, as returned in the Registrar General's First Annual Report (p. 53) for the year 1837–8, are, for Males 837·6, and for Females 899·2. The deaths at age 13 of Males are 774; the mean deaths at ages 11 to 13 of Females are 855. The mortality at the precise age 12½ (10–15) of Males has therefore been reduced in the proportion of $\frac{774}{837\cdot6}$, and the Females in the proportion of $\frac{855}{899\cdot2}$; and the correction resulting brings the λp_{12} for Males to $\bar{1}\cdot9979241$, and for Females to $\bar{1}\cdot9977764$.

The values of λp_{20}, λp_{30} . . . . are derived from the formula $y_x = 10^{\frac{k^2 m}{\lambda r}(1-r^x)}$, by making $x = 1$.

Interpolation.

When the $\lambda\, p_x$ was calculated for the given ages, the intermediate values were interpolated. The following formulas were used; they are applicable even when the intervals between the given points of a curve are unequal.

To find the differences δ^1_0, δ^2_0, δ^3_0, (the latter constant) for interpolating a series of $z+1$ terms, of which four consecutive terms are given, u_0, u_x, u_y, u_z, subtract the value of u_0 from each of the four terms. By this operation u is reduced to zero, and may be rejected; while the differences of the terms remain unchanged. These new values may be used instead of the original ones. The following equations supply the first of each of the orders of differences:—

$$\delta^3 = \frac{6\left\{(y-x)\frac{u_z}{z} - (z-x)\frac{u_y}{y} + (z-y)\frac{u_x}{x}\right\}}{(y-x)\{(z-1)(z-2)-(y-1)(y-2)\}-(z-y)\{(y-1)(y-2)-(x-1)(x-2)\}}$$

$$\delta^2 = \frac{2}{y-x}\left\{\frac{u_y}{y} - \frac{u_x}{x} - \{(y-1)(y-2)-(x-1)(x-2)\}\frac{\delta^3}{6}\right\}$$

$$\delta^1 = \frac{u_x}{x} - (x-1)\frac{\delta^2}{2} - (x-1)(x-2)\frac{\delta^3}{6}$$

When the terms are equidistant $y=2\,x$ and $z = 3\,x$; and by substituting these multiples of x for y and z in the equations, the following equations of a simpler form are obtained:—

$$\delta^3 = \frac{u_{3x} - 3\,u_{2x} + 3\,y_x - u_0}{x^3}$$

$$\delta^2 = \frac{u_{2x} - 2\,u_x + u_0}{x^2} - (x-1)\,\delta^3$$

$$\delta^1 = \frac{u_x - u_0}{x} - (x-1)\frac{\delta^2}{2} - (x-1)(x-2)\frac{\delta^3}{6}.$$

TABLE IX.—TABLE of FACTORS of the form $(x-1)(x-2)$.

x.	$(x-1)(x-2)$.	x.	$(x-1)(x-2)$.	x.	$(x-1)(x-2)$.	x.	$(x-1)(x-2)$.
20	342	30	812	40	1482	50	2352
21	380	31	870	41	1560	51	2450
22	420	32	930	42	1640	52	2550
23	462	33	992	43	1722	53	2652
24	506	34	1056	44	1806	54	2756
25	552	35	1122	45	1892	55	2862
26	600	36	1190	46	1980	56	2970
27	650	37	1260	47	2070	57	3080
28	702	38	1332	48	2162	58	3192
29	756	39	1406	49	2256	59	3306

These factors can always be immediately obtained from a Table of Squares, for let $x = 21$, then $(x-1)(x-2) = 20^2 - 20 = 380$.

General Equation to find smaller differences (θ) from greater ones (δ). Intervals equal. Four orders.

(1.) Let δ^1_{u0}, δ^2_{u0}, δ^3_{u0}, δ^4_{u0}, be the differences when the interval from one term to another is unity (1).

(2.) And let θ^1_{u0}, θ^2_{u0}, θ^3_{u0}, θ^4_{u0}, be the differences when the interval from term to term is $\frac{1}{m}$, then these differences can be deduced from the others by means of the following equations :—

$$\theta^4 = \frac{\delta^4}{m^4}$$

$$\theta^3 = \frac{\delta^3}{m^3} - \frac{3}{2}\left(\frac{m-1}{m^4}\right)\delta^4$$

$$\theta^2 = \frac{\delta^2}{m^2} - \frac{m-1}{m^3}\delta^3 + \left(\frac{11\,m^2 - 18\,m + 7}{12\,m^4}\right)\delta^4$$

$$\theta^1 = \frac{\delta^1}{m} - \frac{m-1}{2\,m^2}\delta^2 + \left(\frac{2\,m^2 - 3\,m + 1}{6\,m^3}\right)\delta^3 - \left(\frac{6\,m^3 - 11\,m^2 + 6\,m - 1}{24\,m}\right)\delta^4.$$

Construction of the Column l_x.

By making the logarithm of $p_x = (\lambda\, p_x)$ the first difference, the series $\lambda\, l_x$ is readily calculated by the method of finite differences. The values of the fundamental logarithms ($\lambda\, p'$), as they are derived directly from the observations, will be found in the Table VIII. (page xxiv), and by the method of interpolation they occur unaltered, in their proper tabular position. The values of $\lambda\, l_x$ are most conveniently calculated, by dividing the series into five sub-series with four orders of differences; the first with three differences commencing at l_0, and the four others at l_3, l_7, l_{20}, and l_{51} for males; l_3, l_7, l_{20}, and l_{54} for females. These may be called points of origin. (See the Table of differences, page cxlv.)

The series of the fundamental columns of the Male and of the Female Life Table are calculated by twice five settings of the Calculating Machine.

The series $\lambda\, v^x + \lambda\, v^{x+1} + \lambda\, v^{x+2} \ldots$ is calculated by taking $\lambda\, v^1$ as the first constant difference, consequently the series $\lambda\,(v^x\, l_x) + \lambda\,(v^{x+1}\, l_{x+1}) + \lambda\,(v^{x+2}\, l_{x+2}) \ldots = \lambda\, D_x + \lambda\, D_{x+1} + \lambda\, D_{x+2} \ldots$ is readily calculated by adding the appropriate $\lambda\, v^1$ to the first difference of the first order of each sub-series. The $\lambda\, v = \lambda\left(\frac{1}{1{\cdot}03}\right)$ when the interest of money is 3 per cent.; and it varies with every rate of interest.

Construction of the Joint Life Table.

For the determination of the values of Life Annuities and of Life Insurances, we require the series $l_x\, l_y + v^1\, l_{x+1}\, l_{y+1} + v^2\, l_{x+2}\, l_{y+2} \ldots + v^{x+n}\, l_{x+n}\, l_{y+n}$. If ω be the limiting age of the Life Table, and $l_\omega = 0$, then x and y may be 0 or ω, or any intermediate ages; but the series terminates whenever either life $x + n$, or $y + n$ becomes $l_\omega = 0$.

The series is rendered more useful by multiplying each term by $v^{\frac{x+y}{2}}$; it then becomes $v^{\frac{x+y}{2}}\, l_x\, l_y + v^{\frac{x+y}{2}+1}\, l_{x+1}\, l_{y+1} + v^{\frac{x+y}{2}+2}\, l_{x+2}\, l_{y+2} \ldots + v^{\frac{x+y}{2}+n}\, l_{x+n}\, l_{y+n}$;

which is written more concisely in the Tables $D_{xy} + D_{(xy)+1} + D_{(xy)+2} + \ldots D_{(xy)+n}$.

Thus, if age of first life $x = 20$, and age of second life $y = 40$; then

$$\frac{v^{30} l_{20} l_{40} + v^{31} l_{21} l_{41} \ldots + v^{99} l_{89} l_{109}}{v^{30} l_{20} l_{40}} = \frac{D_{20,40} + D_{21,41} + D_{22,42} + D_{23,43} \ldots + D_{89,109}}{D_{20,40}} = \frac{N_{20,40}}{D_{20,40}} = A_{20,40};$$

the value of an annuity of £1, payable at the beginning of every year of the Joint Lives.

Let x be the age of the male life, and y the age of the female life; then the series $l_x\, l_y$ has to be calculated for every possible combination of the ages, in order to determine the values of joint annuities on male and female lives of every age. But for obvious reasons the series cannot be conveniently calculated in this form by the machine, as the points of origin will cross each other, and new sets of differences will be required for the variations of age. The following arrangement was, after some consideration, adopted; the $\lambda\, l_0$ of the Female Table was added to the $\lambda\, l_0$ of the Male Table, and then the whole series was calculated with the differences of the Male Table, incorporating $\lambda\, v^{\frac{1}{2}}$, and the (λ) series $l_0\, l_0 + v^{\frac{1}{2}} l_1\, l_0 + v^1 l_2\, l_0 + v^{1\frac{1}{2}} l_3\, l_0 + v^2\, l_4\, l_0$ to the end was obtained in vertical columns. The $\lambda\, l_1$ of the Female Table was added in the same manner to $\lambda\, v^{\frac{1}{2}}\, l_0$ of the Male Table, and a second vertical series was obtained; thus all the 12,100 combinations $(=110 \times 110)$ of $\lambda\, (v^{\frac{x+y}{2}}\, l_x\, l_y)$ were calculated, x varying from 0 to 109, and y varying to the same extent. The annexed scheme will make the method clear; the male l_x being in black type, the female l_y in red type.

JOINT LIVES :—MALE AND FEMALE.

Age of Male (x).	Age of Female						
					4		6
0	l_0	$v^{\frac{1}{2}}\, l_0$	$v^1\, l_0$	$v^{1\frac{1}{2}}\, l_0$	$v^2\, l_0$	$v^{2\frac{1}{2}}\, l_0$	$v^3\, l_0$
1	$v^{\frac{1}{2}}\, l_1$	$v^1\, l_1$	$v^{1\frac{1}{2}}\, l_1$	$v^2\, l_1$	$v^{2\frac{1}{2}}\, l_1$	$v^3\, l_1$	$v^{3\frac{1}{2}}\, l_1$
2	$v^1\, l_2$	$v^{1\frac{1}{2}}\, l_2$	$v^2\, l_2$	$v^{2\frac{1}{2}}\, l_2$	$v^3\, l_2$	$v^{3\frac{1}{2}}\, l_2$	$v^4\, l_2$
3	$v^{1\frac{1}{2}}\, l_3$	$v^2\, l_3$	$v^{2\frac{1}{2}}\, l_3$	$v^3\, l_3$	$v^{3\frac{1}{2}}\, l_3$	$v^4\, l_3$	$v^{4\frac{1}{2}}\, l_3$
4	$v^2\, l_4$	$v^{2\frac{1}{2}}\, l_4$	$v^3\, l_4$	$v^{3\frac{1}{2}}\, l_4$	$v^4\, l_4$	$v^{4\frac{1}{2}}\, l_4$	$v^5\, l_4$
5	$v^{2\frac{1}{2}}\, l_5$	$v^3\, l_5$	$v^{3\frac{1}{2}}\, l_5$	$v^4\, l_5$	$v^{4\frac{1}{2}}\, l_5$	$v^5\, l_5$	$v^{5\frac{1}{2}}\, l_5$
6	$v^3\, l_6$	$v^{3\frac{1}{2}}\, l_6$	$v^4\, l_6$	$v^{4\frac{1}{2}}\, l_6$	$v^5\, l_6$	$v^{5\frac{1}{2}}\, l_6$	$v^6\, l_6$

The *diagonal series* beginning with the centre, where the ages are equal, $= l_0\, l_0 + v^1\, l_1\, l_1 + v^2\, l_2\, l_2$ . . . represents the series $D_{0,0} + D_{1,1} + D_{2,2}$.

Thus all the cases are provided for, whether the male is 0, 1, 2, 3 . . . . . 109 years older than the female, or the female 0, 1, 2, 3 . . . . . 109 years older than the male.

It is evident that Tables for two Male lives may be calculated in the same way as the Table for Male and Female Lives; but while $l_7 \,.\, l_1$ and $l_1 \,.\, l_7$ will differ in the latter case, the factors will be identical in the case of the Table for Two Males. It was decided, however, to calculate the double series of Male Joint Lives, which is equivalent to a calculation in duplicate with a variation in the operation, for $l_{40}\, l_{18}$ in the Male Table is not derived from the same differences as $l_{18}\, l_{40}$. The Female Table was calculated on the same plan; and the results bear testimony to the accuracy of the machine, which the reader himself has the means of testing by comparing in the Male columns $\lambda\, D_{x,y}$ the various combinations of $\lambda\, D_{x,y}$ with $\lambda\, D_{y,x}$ of the Male Joint Life series.

PART II.—DESCRIPTION OF THE TABLES.

(1.) MONETARY TABLES.

Table of Shillings, Pence, and Farthings reduced to the Decimal Parts of £1. (pp. 2–5.)

English money at present consists of the sterling pound (£ 1) unit ; of which the standard weighs 123·27447 grains, consisting of 11 parts fine gold, and 1 part alloy or 113·00161 Troy grains of fine gold and 10·27287 grains of alloy. The gram, = 15·432349 Troy grains, is the unit of the metrical weights. The weight of a standard sovereign is 7·980855 *grams* = 7·318444 *grams* of *fine gold,* and ·662411 *gram* of alloy.* By raising the alloy to ·681556 *gram,* or only ·019145 *gram* more than the alloy now used, the standard English £1 would be represented by a gold coin weighing exactly 8 *grams.* The proportion retains all the advantages in use of the English alloy ($\frac{1}{12}$) over the French alloy of $\frac{1}{10}$. A kilogram of *standard* gold would be coined into 125 sovereigns, and 1,000 sovereigns would weigh 8 kilograms. A crown or a dollar of the fourth part of £ 1, = 5*s.* in value, would weigh two grams ; and a *gram of standard gold* would be worth half-a-crown.

Subordinate units are required for measuring small values ; and in England these units are not yet decimally related to each other, so that to pass from a value expressed in shillings, pence, and farthings to the decimal parts of £ 1, a Table is useful. This Table is due to John Smart.†

It will be observed that if English accounts were kept in £, florins of 10, and mils of 1,000 to the £ 1, this Table would be unnecessary ; and ordinary accounts would possess the advantages which are enjoyed by using a single unit in scientific investigations.

The subsequent Tables represent the relative values in any coin, such as sterling pounds, French francs, Austrian florins, or Prussian dollars ; for if the annuity is expressed in any given coin, its value is expressed by the Tables in the same coin.

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* Annuaire publié par le Bureau des Longitudes, 1861, p. 114.

† Reprinted from Smart's Tables of Interest, Discount, &c.—Edition of 1726.

Logarithms of the Present Value of £1, payable at the end of every Year, at different Rates of Interest = λv^x. (pp. 6–11.)

The interest of the unit of value being i in one year; $\frac{1}{1+i}$ £1 $= \frac{1}{r} = v =$ the present value of £1; and $\frac{1}{(1+i)^x} = \frac{1}{r^x} = v^x =$ the present value of £1 to be received at the end of x years. The logarithms of all the values of v^x from v^0 to v^{109} are given for 12 rates of interest; namely, 3 per cent., $3\frac{1}{4}$, $3\frac{1}{3}$, $3\frac{1}{2}$, $3\frac{3}{4}$, 4, 5, 6, 7, 8, 9, and 10 per cent. The arithmetical complement of λv^x is evidently λr^x, the r^x being the amount of £1 at compound interest for x years. All these series of logarithms were calculated and stereoglyphed by Scheutz's machine; each series having only one order of differences.

[NOTE.—*The direct machine work in the Volume is all in the characteristic type of this Table.*]

Present Value of £1, payable at the end of every Year, at different Rates of Interest = v^x. (pp. 12–15.)

The numbers in the Table were all taken out to six figures from the logarithms; and afterwards—at all except the rates $3\frac{1}{4}$, $3\frac{1}{3}$, and $3\frac{3}{4}$—compared with Smart's Table, which was found so far to be correct. This is satisfactory, as I am not aware that the Tables of this great computist have ever been entirely recalculated.*

Present Value of £1 per Annum, payable at the end of every Year, at different Rates of Interest = $V_x - 1$. (pp. 16–19.)

If the series v^x be summed up from v^0 to v^x the value may be expressed by $V_x = 1 + v + v^2 + v^3 \ldots + v^{x-1} + v^x$. And $V_x - 1 = v^1 + v^2 + v^3 \ldots + v^{x-1} + v^x$. This Table has been compiled (except for the rates $3\frac{1}{4}$, $3\frac{1}{3}$, and $3\frac{3}{4}$) from Smart's work. The value of the perpetuity, from which the $V_{109} - 1$ differs little, may be expressed by $V_\infty - 1$, or simply by $V - 1$ when the annuity is first payable *at the end of one year*, and by V_∞ or V when the first payment is due at the time of valuation.

The values of the v to eight places of decimals corresponding to various rates of interest, of its logarithms (λv) to fifteen places, also of $1 - v = d = \frac{i}{1+i} =$ discount of £1, as it has been called, and its logarithms, are given at page 20.

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* Since the above was written, Mr. Chisholm, in answer to an inquiry, has informed me that the Table of v^x given in his Commutation Tables was calculated by his own computers expressly for the work.

(2.) TABLES FOR SINGLE LIVES.

Yearly Table.—Persons, Males, and Females. (pp. 22–33.)

The English Life Table No. 3. consists of three parts, or three Life Tables, each of seven columns ; the first part for Persons consisting of such proportions at each age of the two sexes as are produced by the births ; the second part for Males ; and the third part for Females. The base of the (1) Table for Persons is 1,000,000 children born alive ; and as boys and girls were born in England during the period of observation in the proportions of 511,745 boys to 488,255 girls, these numbers were made respectively the bases of (2) the Male Life Table, and (3) of the Female Life Table.

In the Synoptical Table (p. 24), the numbers of the males and females living and dying at each year of age are given as they would exist in a population under the law of birth and mortality, found by direct observation to prevail in England and Wales, undisturbed by emigration, by excess of births over deaths, or by any other element of that kind.

The males, we find, if there is no emigration, exceed the females in number in infancy, in childhood, and in manhood up to the age of 53, when the women after the age of childbearing enjoy a firmer hold on life, and die at a lower rate than the men ; so that the number of women of 53 and upwards exceeds the number of men of the corresponding ages. The males are to the females of all ages as 20,426,138 to 20,432,046 ; thus proving decisively that the disparity in the numbers of the two sexes of the English population is due exclusively to emigration.

The Male and Female Life Tables were constructed independently ; that of the Persons was obtained by combining the other two in one.

The column d_x expresses the deaths which occur in the years after the ages x ; thus, by the Table, 5,583 persons die in the year after the precise age 20, so they are all of the age 20 and under 21, or in their 21st year.

The number in the column (d_{20}) is derived from l_0, the basis with which it is connected by the law of mortality prevailing at that and in all preceding ages.

The Table represents a generation of 1,000,000 persons, and it will be observed that in the first year 149,493 die, in the second 53,680, the numbers decreasing every year until the age of 13 ; 3,382 die in their 14th year (13–14) ; after the age of puberty the deaths at each year of age increase, until 15,469 die in the year 73–74. Great numbers die after that age, but the deaths at the advanced ages decrease rapidly, and 92 die at the age of 100, *one* at the age 108. So 109 years (ω) is the limit of age by this Table.

The column l_x is taken from the machine logarithms $\lambda\, l_x$; it is the sum of the column d_x added up from the bottom; so d_x is always the difference of l_x and l_{x+1}. Thus $l_{x+1} + d_x = l_x$; $d_x = l_x - l_{x+1}$. The values d_x were deduced from the primary column l_x.

L_x is the sum of the series l_x; and $L_x = l_x + L_{x+1}$.

P_x is usually taken to represent the tabular population living at the age x and under $x + 1$; thus by this Table 600,615 is the normal population of the age 30 and under 31; and it is usually taken as the mean of the numbers by the Table living to 30 and 31; that is, $P_x = \frac{l_x + l_{x+1}}{2} = l_{x+1} + \frac{d_x}{2}$. The series $\lambda\, l_x$ by the machine was calculated with the proper differences, to give the logarithms of the values l_x, $l_{x+\frac{1}{4}}$, $l_{x+\frac{1}{2}}$, $l_{x+\frac{3}{4}}$, and l_{x+1}; thus, by the Male Table, $l_{30} = 304{,}534$; $l_{30\frac{1}{4}} = 303{,}770$; $l_{30\frac{1}{2}} = 303{,}004$; $l_{30\frac{3}{4}} = 302{,}236$; $l_{31} = 301{,}466$. Here $\frac{304{,}534 + 301{,}466}{2} = 303{,}000$; which differs little at this age from $l_{30\frac{1}{2}} = 303{,}004$. At other ages where the series d_x is varying rapidly, the values $\frac{l_x + l_{x+1}}{2}$ differ more from the value of $l_{x+\frac{1}{2}}$; but the difference is never considerable, so that no error of consequence can be committed by taking $\frac{l_x + l_{x+1}}{2}$ to represent the numbers living through the year of age following x. The $l_{x+\frac{1}{2}}$ is, however, preferable to the other, and is probably the most correct; for its logarithm is calculated by the machine as part of the series. The symbol $l_{x+\frac{1}{2}}$ and P_x may for practical purposes be used indiscriminately.

See all the values of the logarithms and numbers of l_x, and $l_{x+\frac{1}{4}}$, $l_{x+\frac{1}{2}}, = P_x$, $l_{x+\frac{3}{4}}$ and l_{x+1}; the logarithms at pp. 130–133, and the numbers at pp. 146–149.

The number of deaths decreases rapidly in each month after birth. The Table VII. (page xxiii) of living and the deaths at the end of each month of the first year of life is in itself interesting; it was obtained for each of the first three months directly from the returns; from the aggregate deaths in the second quarter, and in the last two quarters; so the deaths in each of the other nine months were interpolated. The particular value P_0 was deduced directly from the 13 values, $l_0 + l_{\frac{1}{12}} + l_{\frac{2}{12}} \ldots\ldots + l_1$.

Q_x is the sum of the column P_x; and in all cases $Q_x = P_x + Q_{x+1}$, and $P_x = Q_x - Q_{x+1}$. The column represents—to the basis 1,000,000—(1) the tabular *numbers living* of every age x and upwards; also (2) the *number of years* of life which the l_x persons of the age will enjoy; so that $\frac{Q_x}{l_x}$ = the mean afterlifetime at the age x.

Y_x is a column which I have added to the Life Table, to extend its use to the solution of problems involving the ages of the living.

$Y_x = Y_{x+1} + Q_{x+1} + \frac{1}{2} P_x$; and $\frac{Y_x}{Q_x}$ = the mean *afterlifetime* of all the persons of the *age x and upwards*; also $x + \frac{Y_x}{Q_x}$ = *the mean age* of the persons living of the age x and upwards. Thus the men of the age of 40 *and upwards* are of the average age of 56·26; they will live 16·26 years longer, and die at the average age 72·52 years.

The numbers and logarithms of the columns l_x, Q_x, and Y_x are given for males (pp. 28–29) and females (pp. 32–33).

Yearly Table.—Mortality of Males and Females at different Ages. (pp. 34–35.)

The *annual rate of mortality* $\frac{d_x}{P_x}$ = at all ages after the first $\frac{d_x}{l_{x+\frac{1}{2}}} = m_x$ was calculated for males and females; and 100 m_x or the mortality per cent. is printed. The reciprocal $\left(\frac{P_x}{d_x}\right)$ gives the number living at the age x to $x+1$ out of which *one death* occurs annually. Thus at the age 20 (and under 21) the mortality is at the rate of one death in 120 men; or $(100\ m_{20}) = {\cdot}832$ per cent. By inserting two ciphers after the decimal point we have $m_{20} = {\cdot}00832$; and on passing the decimal point *one* to the right, 8·32 is the mortality per 1,000, which is a convenient unit for several of the intermediate ages of life.

Two columns of the same Table show the rate of mortality among males and females of the age x and upwards; thus, males of the age of 20 and upwards die at the rate of 1 in 39·48 annually; women of the age of 60 and upwards die at the rate of 1 in 14·34.

1 in 39·91 males and 1 in 41·85 females of all ages die annually in a stationary population, under the English law of mortality.

Yearly Table.—Mean Afterlifetime of Males and Females; Mean Age of the Living; and Mean Age at Death. (pp. 36–39.)

These numbers also represent the *mean lifetime* (E_x), which is 39·91 years for males, and 41·85 years for females, when $x = 0$. The *afterlifetime* is usually called the Expectation of Life at the age x; but this common expression of three words is admitted to be open to objection. The mean *afterlifetime* is obtained by dividing the tabular years of life (Q_x) which are enjoyed after any age x, by the tabular numbers l_x living at that age.

Q_x is the sum of the values $l_{x+\frac{1}{2}}$, from any given age after $x = 1$, to the end of the Table; and $L_x = l_x + l_{x+1} + l_{x+2} + l_{x+n} \dots l_\omega$. Now it has been shown that $l_{x+\frac{1}{2}}$ differs little at any age from $\frac{l_x + l_{x+1}}{2}$ $\therefore$ $L_x - \frac{1}{2} l_x = \frac{1}{2} l_x + l_{x+1} + l_{x+2} \dots + l_\omega$, differs little from Q_x; and $E_x = \frac{Q_x}{l_x} = \frac{L_x}{l_x} - \frac{1}{2}$ nearly; these two are the limits of the expression for the afterlifetime, which for persons is 40·86 at birth by the first, and 40·89 by the last formula. The deaths in *each year of age* are by the last formula assumed to take place at equal intervals, and the living during that short interval to decrease in arithmetical progression; while in the former formula the living in the *middle of the year* are taken to represent the mean numbers living *through the year.* The lifetime in years is not greater than the one, nor less than the other number.

Age (x)	MEAN AFTERLIFETIME OF MALES DEDUCED FROM		
	$\left(\frac{L_x}{l_x}-\frac{1}{2}\right)=E_x$	$\left(\frac{{}_4L_x}{4\,l_x}-\cdot125\right)^{*}=E_x$	$\frac{Q_x}{l_x}=E_x$
0	39·86 †	39·92	39·91
1	46·67	46·66	46·65
14	43·97	43·97	43·97
28	34·10	34·10	34·10
42	24·73	24·73	24·73
56	15·86	15·86	15·86
70	8·46	8·46	8·45
84	3·97	3·96	3·95
98	1·91	1·87	1·85

* ${}_4L_x$ = sum of Column l_x in Quarterly Male Table (pp. 146–7) from the bottom up to l_x, and $\frac{{}_4L_x}{l_x} - \cdot125 = 4\,E_x$.

† This number is corrected for the excess of deaths in the first months of the first year of age. (See Table VII. p. xxiii.)

The Table (pp. 36–37) shows the mean *afterlifetime* of males of the age x and upwards; that is, of males of the age of x, and of every higher age. At birth it is 31·77 years; and that is also the *mean age* of the living in a normal population having equal numbers of births and of deaths, subject at all ages to the English law of mortality.

The equation $E'_0 = \frac{Y_0}{Q_0}$ *represents the mean ages of the living,* for Y_0 is the sum of the series $\frac{1}{2}\,Q_0 + Q_1 \ldots + Q_\omega$; which is again, as may be found by substituting for Q_x its values in P_x, the equivalent of $\frac{1}{2}\,P_0 + 1\frac{1}{2}\,P_1 + 2\frac{1}{2}\,P_2 + 3\frac{1}{2}\,P_3 \ldots + (n + \frac{1}{2})\,P_n$ carried to the extreme limits of the Table. Now the mean age of the living at the age 0 and under 1 is nearly $\frac{1}{2}\,P_0$; at 1 and under 2 it may be taken at $1\frac{1}{2}$ years; consequently $1\frac{1}{2} \times P_1$ = the number of years that the persons of the age 1 and under 2 have lived. The same reasoning will apply at 20, or at any other age n; and the sum of the series $(n + \frac{1}{2})\,l_{n+\frac{1}{2}}$, in which n is made to vary from 0 to 109, will be $= Y_0 =$ sum of the number of years that the whole normal population has lived. But the numbers who have lived Y_0 years are Q_0; and $\frac{Y_0}{Q_0}$ = the average age. In like manner it may be shown that $Y_x = \frac{1}{2}\,l_{x+\frac{1}{2}} + 1\frac{1}{2}\,l_{x+1\frac{1}{2}} + 2\frac{1}{2}\,l_{x+2\frac{1}{2}} + 3\frac{1}{2}\,l_{x+3\frac{1}{2}} + 4\frac{1}{2}\,l_{x+4\frac{1}{2}} \ldots\ldots$ to tabular limit = the number of years that all the persons (Q_x) have lived over age x. And $xQ_x + Y_x$ = the total number of years that the Q_x persons have lived; $\therefore \frac{xQ_x + Y_x}{Q_x} = x + \frac{Y_x}{Q_x} = x + E'_x$ = mean age of all the persons living of the age of x and upwards.

Y_x also represents the number of years of life that Q_x persons of the tabular ages will live; and $\frac{Y_x}{Q_x}$ = their mean *afterlifetime.* It has been shown that Q_x = the number of years that l_x persons of the age x will live; and Q_{x+1} = the number of years that l_{x+1} persons will live; $\therefore (l_x + l_{x+1})$ persons will live $(Q_x + Q_{x+1})$ years; and $\frac{1}{2}(l_x + l_{x+1})$ persons $= P_x$ will live $\frac{1}{2}(Q_x + Q_{x+1})$ years. In like manner it may be shown that $\frac{l_{x+1} + l_{x+2}}{2} = P_{x+1}$ persons will live $\frac{1}{2}(Q_{x+1} + Q_{x+2})$ years; and as the sum of the series P_x from any given age to the end of the Table is Q_x, so the sum of the series $\frac{1}{2} Q_x + Q_{x+1} + Q_{x+2} + Q_{x+3} \ldots\ldots + Q_\omega = Y_x$ = the number of years of life that the Q_x persons will enjoy; $\therefore E'_x = \frac{Y_x}{Q_x}$ = the mean *afterlifetime* of all the persons of the ages $x + \frac{Y_x}{Q_x}$. By adding their *afterlifetime* to *the age,* the mean age at death is found to be $x + 2\,E'_x = x + 2\frac{Y_x}{Q_x}$.

The constituent individuals of a population are its elements; and the population is normal when its elements, arranged in corresponding groups, are in the same proportions as the elements of the Life Table. The births = deaths in the same time; to a given number born, the living at each year of age are in the same proportion as P_x to l_0; the rates of mortality are the same; the population lives a number of years after each age, represented by the calculated lifetime.

In a normal population there is an indissoluble connexion between (1) the numbers living, (2) the mean lifetime, (3) the births, (4) the deaths, (5) the rate of mortality, (6) the probable duration of life. Thus by the Life Table of Persons 1,000,000 annual births imply 1,000,000 annual deaths; sustaining a population of 40,858,184, of whom 20,426,138 are males, 20,432,046 are females; half of the persons living 45 years = the probable lifetime; and the mean lifetime being 40·858184 or nearly 41 years; that is = the mean age at death = the number of years of life falling to the share of the children born. To 41 persons living there is *one* birth, *one* death, annually; the rate of mortality is 1 in 41; and 41 is the mean duration of life.

It has been shown that the *rate of mortality* involves three elements,—time, numbers living, numbers dying; thus, if out of 102 living men of a given age, 4 die at equal intervals in the year, 98 will live to the end of the year; so $\frac{98}{102}$ = the probability of living a year; $\frac{4}{102}$ = the probability of dying in the same time; and by hypothesis the 102 men in the year enjoy among them $\frac{102 + 98}{2}$ = 100 years of life; now the years of life to be passed by the survivors in the next year will, if 4 die in the year, be 96, and thus the years of life will accumulate year by year, until the last life shall expire. All the years of life belong to the 102 men; and dividing the said years of life by 102 the mean afterlifetime is determined. Thus the units of the numbers that express living men, men dying, and years of life, are produced by men living a definite number of years and then dying.

By retaining one unit of time, and one living, in all cases, the variations of the m express the variations in the rate of mortality. By fixing the numbers living, and taking the death as a unit, the mean interval of time—which varies—between each death, will express the velocity of dying in the scale of time, under different conditions; and by making the living man a unit, the death becomes a unit, and the variations in the years of lifetime express the different degrees of longevity. By making the time a unit (one year), and the death a unit, the variations in the *numbers living,* out of which 1 death occurs annually—or the relative amount of resistance to death by life is expressed—under the given conditions. One death in *one* year to 41 *living,* implies a mean lifetime of 41 years. It was shown before that 41 persons living through *one year* enjoy the same number of *years of life* as *one person* living *forty-one years.*

In a population which is disturbed by emigration, by immigration, by varying excesses of births over deaths or of deaths over births, or by pestilence, the *mean age of the dying* (G_0) can be determined from the registers by arranging the deaths consecutively in a column (d_x) at the various ages, and drawing up from this column the columns corresponding to l_x and L_x or even to Q_x. The Table thus constructed gives the mean age of the dying in the year or years, as this property depends solely on the fact that when the figures are so arranged and related, $G_0 = \frac{L_0}{l_0} - \frac{1}{2} = \frac{Q_0}{l_0} = \frac{1}{l_0} (\frac{1}{2} d_0 + 1\frac{1}{2} d_1 + 2\frac{1}{2} d_2 + 3\frac{1}{2} d_3 \ldots + (\omega + \frac{1}{2}) d_\omega)$ $= \frac{1}{l_0} (d_1 + 2 d_2 + 3 d_3 + 4 d_4 \ldots \omega d_\omega) + \frac{1}{2}$.

The two latter series (d_x) express evidently the number of years lived by the persons dying at all ages $= l_0$. But people are born in one place, die in another, and moreover the number of births is scarcely ever the same as the number of deaths. So there is no necessary connexion between the ages of these persons at death, the rate of mortality, the probability of living, or the mean duration of the lives of children born and living in precisely the same circumstances. The results nearly coincide sometimes with those deduced, on correct principles, from a Life Table; and the early Life Tables of Halley, Simpson, Dr. Price, and others, were constructed from the Burial Registers of Breslau, London, and Northampton, without any reference to the living. The errors of such Tables are illustrated in the Appendix to the 8th Report of the Registrar General, where the old incorrect Northampton Table is compared with a new Table for Northampton constructed on nearly the same plan as the English Table.

The mean age of those who died in England in the 17 years 1838–54 was 29·4; whereas the mean lifetime of children born in England during the same period is 40·9 years by the Life Table. This reduction of the age at death, 11·5 years below the mean lifetime, is the result of the introduction of an excess of young lives; as in addition to the 380,631 births to balance the 380,631 deaths, 191,068, making 571,699 children in the whole, were born annually and thrown into the population. The mean age of the dying = the mean age to which people live in a normal population; but as our population is increasing, the mean age of the dying in a limited time is 11·5 years less than the mean lifetime. The mean age of the population of England was 26·4 years in 1851, instead of 32·1 years; so the excess of young people reduces the age of the nation by 5·7 years, or by half the difference $\left(=\frac{11\cdot5}{2}\right)$ between the age at death (29·4) and the mean lifetime (40·9). Instead of living as long as they have lived (26·4 years), they will live about 35·6 years (= $E_{26\cdot4}$).

Yearly Table.—Males and Females. Logarithms of the Probability of living One Year after Age $x = \lambda p_x$. (p. 40.)

The logarithms of the probability of living one year after each age (x) are deduced from the Male and Female Life Tables. Thus $\frac{l_{x+1}}{l_x} = p_x$; and $\lambda p_x = \lambda l_{x+1} - \lambda l_x$. The probability at age x of *dying in the year following* is immediately deducible from the probability of living to the end of the year. Thus $\mu_x = 1 - p_x = \frac{l_x - l_{x+1}}{l_x} = \frac{d_x}{l_x}$. And $\lambda \mu_x = \lambda d_x - \lambda l_x$. For the Table of the λd_x at all ages, see Table 3., p. cxlviii.

(3.) TABLES FOR SINGLE LIVES. (WITH INTEREST.)

Yearly Table.—Males. (pp. 42–74.)

Values of the series $\lambda D_x = \lambda (v^x l_x)$, when x = age varies from 0 to 109, and when in $v = \frac{1}{1+i}$ the i is taken to represent 12 rates of interest, namely, 3, $3\frac{1}{4}$, $3\frac{1}{3}$, $3\frac{1}{2}$, $3\frac{3}{4}$, 4, 5, 6, 7, 8, 9, 10 per cent.

[NOTE.—*All the values* λD_x *were calculated and stereoglyphed by the machine.*]

The D_x and N_x, as well as λD_x and λN_x, are given in order for every rate of interest; from which the value of the life annuity, temporary or deferred, is immediately deduced.

The full Tables of six columns are given for the 3, 4, and 5 per cent. rate of interest. The relations of the columns are evident on inspection :—

$$\begin{aligned}
N_x &= D_x + D_{x+1} + D_{x+2} \ldots + D_\omega = v^x l_x + v^{x+1} l_{x+1} \ldots\ldots \\
S_x &= N_x + N_{x+1} + N_{x+2} \ldots + N_\omega \\
&= D_x + 2 D_{x+1} + 3 D_{x+2} + 4 D_{x+3} \ldots + (n+1) D_{x+n} \ldots + (\omega+1-x) D_\omega \\
S_{x|n} &= N_x + N_{x+1} + N_{x+2} \ldots + N_{x+n-1} \\
M_x &= C_x + C_{x+1} + C_{x+2} \ldots + C_\omega = v^{x+1} d_x + v^{x+2} d_{x+1} \ldots\ldots \\
R_x &= M_x + M_{x+1} + M_{x+2} \ldots + M_\omega ;\ R_{x+n} = M_{x+n} + M_{x+n+1} \ldots\ldots\ldots \\
&= 1 C_x + 2 C_{x+1} + 3 C_{x+2} \ldots + (n+1) C_{x+n} \ldots + (\omega+1-x) C_\omega \\
R_{x|n} &= M_x + M_{x+1} \ldots + M_{x+n-1} = 1 C_x + 2 C_{x+1} + 3 C_{x+2} \ldots\ldots + n C_{x+n-1} \\
&\quad + n M_{x+n}.
\end{aligned}$$

The columns $D_x = v^x l_x$; and $C_x = v^{x+1} d_x$; the columns N_x and S_x bearing precisely the same relations to D_x as the columns M_x and R_x bear to C_x.

The logarithms $\lambda\, D_x$, $\lambda\, N_x$, $\lambda\, A_x$, and $\lambda\, M_x$ for 3, 4, and 5 per cent. interest are given in convenient juxtaposition for use (see pp. 50–51 for example); and $\lambda \left(\frac{M_x}{D_x}\right) = \lambda\, \Pi_x$; and $\lambda \left(\frac{M_x}{N_x}\right) = \lambda\, \pi_x$ for 3 per cent. are added.

For 3 per cent. interest, the values of Life Annuities of £1 $= A_x$; of $\frac{1}{A_x} = a_x$; of $\frac{D_x}{C_x}$; of $\frac{D_x}{M_x} = \Sigma_x$; of $\frac{N_x}{M_x} = s_x$; of $\frac{C_x}{D_x}$; of $\frac{M_x}{D_x} = \Pi_x$; and of $\frac{M_x}{N_x} = \pi_x$, are given in comprehensive Tables (see pp. 52–53).

Two curious Tables are given at pp. 54–55, and 68–69, for determining the values of annuities on the whole of a contemporaneous population, in the normal proportions, at two rates of interest, 3 and 5 per cent.

Yearly Table.—Females. (pp. 76–108.)

The set of Tables for Females exactly corresponds with that for Males, which has just been enumerated.

Half-yearly and Quarterly Tables.—Males and Females.
(pp. 110–174.)

The interest of money is assumed to be convertible half-yearly, so $v = \frac{1}{1 + \frac{i}{2}} = \frac{1}{1 \cdot 015}$; and as the unit of age (x) in the series D_x is the half-year, $D_{41} = l_{20\frac{1}{2}}\, v^{41} = l_{20\frac{1}{2}} \left(\frac{1}{1 + \frac{i}{2}}\right)^{41}$. The logarithms of the probability of living half a year (p_x) after the age x, $x\frac{1}{2}$ . . . . . . , as well as the logarithms of the values ($v\, p_x$), are given at the pages 110–113. These Tables and the corresponding Quarterly Tables will be of use. In the Quarterly Tables $v = \frac{1}{1 + \frac{i}{4}} = \frac{1}{1 \cdot 0075}$; and $D_{81} = v^{81}\, l_{81} = v^{81}\, l_{20\frac{1}{4}}$. Here interest is convertible quarterly.

The two series $\lambda\, l_x$, pp. 130–133, give the logarithms calculated and stereoglyphed by the machine, for each age l_x, $l_{x+\frac{1}{4}}$, $l_{x+\frac{1}{2}}$, $l_{x+\frac{3}{4}}$, l_{x+1}. Thus $\lambda\ l_{20\frac{1}{2}}$ is the logarithm of the numbers living by the Life Table at the age $20\frac{1}{2}$; it is therefore $= \lambda\, P_{20}$. All the values of $\lambda\ l_x$, $\lambda\, l_{x+1}$ will be found in this Table under numbers $4\,x$, $4\,x + 4$ . . . . Thus $\lambda\ l_{30} = \lambda\ l_{4 \times 30}$ in Quarterly Table $= 5 \cdot 4836359$; by the Male Table, page 130.

Interest taken at the rate of 3 per cent., or at the rate of £1 interest for every £ $33 \cdot 33\dot{3}$ invested, implies that the value of the correlative annuity of £1 payable at the end of every year is worth $33 \cdot 33\dot{3}$ years' purchase. In like manner an annuity of £ $0 \cdot 5$ half-yearly is worth £ $33 \cdot 333$, interest being convertible half-yearly. If the annuity (£1) is due and payable at the beginning of the year, it is worth £ $34 \cdot 33\dot{3}$; if the annuity (£$\cdot 5$) is due at the beginning of every *half-year* in perpetuity, it is worth $33\cdot 83\dot{3}$. The difference in the value of the two annuities so payable is ·5; and it is in favour of the yearly annuity.

The value of a life annuity of £1 on a man age 20, first payment at that age, is £22·0612; and if the first payment is only due at the end of the year, it is worth £1 less, or £21·0612.

A similar annuity, at age 20, payable by half-yearly instalments, is worth £21·7277, and £21·2277; for if the £·5 instalment is paid only at the end of the first half-year, it implies a clear deduction to that amount from the first value.

As some Life Annuities are paid half-yearly, and as interest is in the case of dividends and rents and mortgages also paid half-yearly, and is therefore convertible half-yearly, it appeared desirable to construct a Half-yearly Life Table; for half-yearly and quarterly premiums are used for insurance purposes by many offices; and the policies have to be valued periodically, at intervals, between the periods of the payments. Half-yearly and Quarterly Tables will therefore afford the actuary assistance in the solution of some practical as well as theoretical questions.

The Half-yearly Table of Annuities gives the values of £1 payable at the beginning of *every half-year* of the life's existence; thus at the age 20 that value is £43·4554; and the value of £·5 half-yearly, £1 annually, so paid is £$21\cdot 7277 = \frac{43\cdot 4554}{2}$; which is reduced to 21·2277 by striking off the first instalment.

The Quarterly Table gives the value of £1 payable at the age x, and at the beginning of every quarter of a year that the life shall exist. This value at the age 20 is £86·2445, and $\frac{86\cdot 2445}{4} = 21\cdot 5611$ is the value of quarterly instalments of £·25 so payable. Deducting the first payment, the value is reduced to £21·3111.

It will be observed that the yearly life annuity exceeds in value the half-yearly, and still more the value of the quarterly, when the first payment is due at any age x; for instance, at the age 20 the excess over the half-yearly is £·3335, over the quarterly £·5001.

When the first payment is at the end of the year, half-year, or quarter, the yearly annuity so payable is worth less than the half-yearly annuity by £·1665 at the age 20, and less by £·2499 than the £1 annuity in quarterly payments.

The effect of half-yearly and quarterly payments on annuities and premiums at all ages is shown in the Tables, or in a succinct form in Table X. on the next page.

TABLE X.—VALUES OF ANNUITIES, of PREMIUMS, and of POLICIES, by ANNUAL, HALF-YEARLY, and QUARTERLY TABLES for MALE LIVES.

AGE. (x)	LIFE ANNUITY OF £1. (Interest 3 per Cent.)					
	Payable at the *Beginning* of every Period.			Payable at the *End* of every Period.		
	Yearly A_x	Half-yearly Instalments $\frac{{}_2A_x}{2}$	Quarterly Instalments $\frac{{}_4A_x}{4}$	Yearly $A_x - 1$	Half-yearly Instalments $\frac{{}_2A_x - 1}{2}$	Quarterly Instalments $\frac{{}_4A_x - 1}{4}$
	£	£	£	£	£	£
15	23·1052	22·7632	22·5922	22·1052	22·2632	22·3422
20	22·0612	21·7277	21·5611	21·0612	21·2277	21·3111
21	21·8743	21·5423	21·3766	20·8743	21·0423	21·1266
30	20·0143	19·6972	19·5389	19·0143	19·1972	19·2889
31	19·7840	19·4686	19·3112	18·7840	18·9686	19·0612
40	17·4744	17·1740	17·0243	16·4744	16·6740	16·7743
41	17·1916	16·8928	16·7439	16·1916	16·3928	16·4939
50	14·4242	14·1395	13·9978	13·4242	13·6395	13·7478
51	14·0925	13·8093	13·6683	13·0925	13·3093	13·4183
60	11·0176	10·7456	10·6106	10·0176	10·2456	10·3606
61	10·6650	10·3940	10·2595	9·6650	9·8940	10·0095
70	7·6100	7·3452	7·2144	6·6100	6·8452	6·9644
71	7·2993	7·0350	6·9044	6·2993	6·5350	6·6544

AGE. (x)	ANNUAL PREMIUM to insure **£100,** payable			VALUE of **£100** payable at the *End* of Period in which Death shall occur. SINGLE PREMIUM for **£100.**		
	Yearly π_x	Half-yearly Instalments $2\,({}_2\pi_x)$	Quarterly Instalments $4\,({}_4\pi_x)$	Year Π_x	Half Year ${}_2\Pi_x$	Quarter ${}_4\Pi_x$
	£	£	£	£	£	£
15	1·4154	1·4374	1·4488	32·703	32·720	32·728
20	1·6202	1·6468	1·6604	35·744	35·780	35·798
21	1·6590	1·6864	1·7004	36·288	36·328	36·348
30	2·0838	2·1212	2·1404	41·706	41·782	41·820
31	2·1420	2·1808	2·2008	42·377	42·457	42·498
40	2·8100	2·8672	2·8964	49·104	49·239	49·307
41	2·9042	2·9640	2·9948	49·927	50·070	50·142
50	4·0201	4·1168	4·1664	57·987	58·208	58·319
51	4·1833	4·2860	4·3388	58·954	59·184	59·300
60	6·1637	6·3506	6·4468	67·910	68·240	68·405
61	6·4639	6·6654	6·7696	68·937	69·279	69·451
70	10·2281	10·6588	10·8836	77·835	78·290	78·518
71	10·7872	11·2592	11·5060	78·739	79·207	79·441

NOTE.—The Table is read thus:—The PRESENT VALUE OF AN ANNUITY OF **£1** payable at the *Beginning* of every Year commencing from Age 20 is £22 1*s.* 3*d.* The same Annuity payable by Two HALF-YEARLY Instalments of 10*s.* each is worth £21 14*s.* 6*d.*; and if payable by Four QUARTERLY Instalments of 5*s.* each it is worth £21 11*s.* 3*d.* If the Annuity be payable at the *End* of each YEAR, HALF YEAR, or QUARTER, it is worth £21 1*s.* 3*d.*, £21 4*s.* 6*d.*, and £21 6*s.* 3*d.*, respectively. The PREMIUM commencing at Age 20 to insure £100 at Death is £1 12*s.* 5*d.* if paid YEARLY; but the Annual Premium becomes £1 12*s.* 11*d.* if it be paid by HALF-YEARLY Instalments of 16*s.* 5½*d.* each, and £1 13*s.* 2*d.* if it be paid by QUARTERLY Instalments of 8*s.* 3½*d.* each. The PRESENT VALUE, at the Age 20, of **£100** payable at the *End* of the YEAR in which Death occurs is £35 14*s.* 11*d.*; if payable at the *End* of the HALF YEAR in which Death occurs its present Value is £35 15*s.* 7*d.*; and if payable at the *End* of the QUARTER in which Death occurs its present Value is £35 16*s.* 0*d.*

In practice the additional work involved in frequent payments has to be taken into account in the loading of the premiums.

As A_x = the value of £1 a year for life, first payment at age x; so let ${}_nA_x$ = the tabular value of £1 at every n^{th} part of a year of life, first payment at age x; and $\frac{{}_nA_x}{n}$ = the value of £$\frac{1}{n}$ paid n times a year under the same conditions. Then $\frac{{}_2A_x}{2}$ = the tabular value of £1 a year for life payable by half-yearly instalments of £0·5, first payment at age x. And $A_x - 1$ = the value of £1 a year for life, first payment at age $x + 1$; and $\frac{{}_2A_x}{2} - \frac{1}{2}$ = the value of the life annuity of £1 by half-yearly instalments of £·5, first payment at age $x + \frac{1}{2}$. So also $\frac{{}_4A_x - 1}{4} = \frac{{}_4A_x}{4} - \frac{1}{4}$ = the value at age x of life annuity of £1, payable by quarterly instalments of £·25, first payment at age $x + \frac{1}{4}$.

As $A_x > \frac{{}_nA_x}{n}$;

Put $z_n = A_x - \frac{{}_nA_x}{n}$ = difference between values of initial annuities.

$y_n = \left(\frac{{}_nA_x}{n} - \frac{1}{n}\right) - (A_x - 1)$ = difference between values of annuity payments deferred for one term.

By addition $z_n + y_n = \frac{n-1}{n} = 1 - \frac{1}{n}$.

$$\frac{{}_nA_x}{n} + z_n = A_x$$

$$\frac{{}_nA_x}{n} = A_x - z_n$$

$z_n = \left(1 - \frac{1}{n}\right) - y_n$ = difference between values of initial annuities paid by *one* and by n annual instalments.

$$y_n = \left(1 - \frac{1}{n}\right) - z_n.$$

So z_n subtracted from A_x gives $\frac{{}_nA_x}{n}$; and y_n added to $A_x - 1$ gives $\frac{{}_nA_x}{n} - \frac{1}{n}$.

Example. Males:—

$A_{20} = 22{\cdot}0612$; $\frac{{}_2A_{20}}{2} = 21{\cdot}7277$; and $22{\cdot}0612 - 21{\cdot}7277 = {\cdot}3335 = z_2$

So z_2 *subtracted* from A_{20} = value of half-yearly annuity.

$A_{20} - 1 = 21{\cdot}0612$; $\frac{{}_2A_{20}}{2} - {\cdot}5 = 21{\cdot}2277$;

$y_2 = 21{\cdot}2277 - 21{\cdot}0612 = {\cdot}1665$;

$A_{20} - 1 + {\cdot}1665 = \frac{{}_2A_{20}}{2} - {\cdot}5$;

so y_2 *added* to the *value* of the life annuity of £1, first payment at age $x + 1$, is = the value of the life annuity of £1 in half-yearly instalments of £·5, first payment at age $x + \frac{1}{2}$, the part of the latter being paid earlier; the half-yearly annuity is worth more than the yearly annuity, of which the payments are deferred longer.

The value of z in the case of the quarterly annuity at the same age is $22·0612 - 21·5611 = ·5001$; and the value of $y = 21·3111 - 21·0612 = ·2499$. So *subtract* ·5001 from A_{20}, and the initial value of the quarterly annuity is obtained; *add* $y = ·2499$ to $A_{20} - 1$; and the value of the quarterly annuity, first payment at age $20 + \frac{1}{4}$, is given. This correction differs from the common one, which Mr. Davies shows, when interest is convertible into principal only once a year, at 3 per cent. interest, is $y = ·2463$ for the half-yearly, and $y = ·3704$ for the quarterly, or nearly half as much again as y.* The interest is assumed in the common method only to be convertible into principal annually; and the results agree nearly with Simpson's rule, which makes $y = ·25$ for the *half-yearly annuity*; $y = ·375$ for the quarterly annuity; and $y = ·50$ for the annuity payable momently; or generally $y = \frac{n-1}{2n}$.

The Tables have been constructed on the principle which Dr. Price asserted†: for the half-yearly Table this procedure is strictly conformable to practice; while that cannot be said of the yearly or quarterly Tables, except in the case of rents and of peculiar investments.

EXAMPLE :—

VALUE at age 20 of Annuity of £1, first payment in all cases at age 20:

Initial Payments:—	Yearly - -	22·0612	
	Half-yearly -	21·7277	$·3335 = z_2$
	Quarterly -	21·5611	$·5001 = z_4$

VALUE of Annuity of £1 at age 20, first payment at age $20\frac{1}{4}$ in the case of quarterly, $20\frac{1}{2}$ in the case of half-yearly, and at 21 in the case of the yearly annuity:

Deferred Payments:—	Quarterly -	21·3111	$·2499 = y_4$
	Half-yearly -	21·2277	$·1665 = y_2$
	Yearly - -	21·0612	

The value of the annuity in one instalment annually is invariably taken as the point of departure; and y is *added to* the value of the annuity of which the first payment is deferred one year (namely, to $A_x - 1$) to obtain the corresponding annuity by half-yearly or by quarterly instalments. This correction is in the form commonly given in books; and it differs accordingly as interest is assumed to be convertible annually, or half-yearly, or quarterly. The z is complementary to y, and is subtracted from A_x to obtain the value of the corresponding annuity paid by n instalments annually.

It will be observed that the values of z decline in proportion as the payments of one or more of the n parts of the annuity of £1 are deferred; the above reduction in initial values is ·3335 in passing from the yearly to the half-yearly, and ·5001 in passing from the yearly to the quarterly annuity.

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* Davies on Life Annuities, pp. 314–317.

† *See* Price on Annuities, 7th Edition, Vol. I., pp. 237–271.

Commencing at the lowest value of the preceding deferred payments, 21·0612, the addition of $y = \cdot 1665$ gives the value of the half-yearly annuity, and of $y = \cdot 2499$ the quarterly annuity.

From y the value of z is easily obtained. For as $z + y = \frac{n-1}{n}$ in each case, $z = \frac{n-1}{n} - y$; or if $n = 2$; $z = \cdot 5 - \cdot 1665 = \cdot 3335$. And if $n = 4$, then $z = \cdot 75 - \cdot 2499 = \cdot 5001$ at age 20.

By Simpson's rule the $z = y = \frac{n-1}{2n}$ in all cases, and $A_x - \cdot 25 =$ the value of the half-yearly annuity, first payment at age x. $A_x - \cdot 375 =$ the value of the quarterly annuity, first payment at age x. $A_x - 1 + \cdot 25 = A_x - \cdot 75 =$ the value at age x of the half-yearly annuity, first payment at age $x + \frac{1}{2}$. And $A_x - 1 + \cdot 375 = A_x - \cdot 625 =$ the value at age x of the quarterly annuity, first payment at age $x + \frac{1}{4}$.

The value of z, it will be observed in the Tables, decreases from the age at which A_x is a maximum, and, conversely, y increases. Thus in the Half-yearly Male Tables, z is ·3566 at the age of 6 years, and ·2648 at the age of 70; while the y is ·1434 at the age 6, and ·2352 at 70.

(4.) TABLES FOR JOINT LIVES.

Male and Female; Two Males; Two Females.

The Tables from page 176 to page 605 are Tables for the determination of the value of life annuities or insurances, present, temporary, and deferred,—on every possible combination of two male lives, two female lives, and a male and a female life; the male life being either older or younger than the female life.

The first series of Tables for Male and Female Joint Lives (pp. 176–247) contains the logarithms of all the values of $D_{x,y} = l_x \, l_y \, v^{\frac{x+y}{2}} = l_x \, l_y \left(\frac{1}{1 \cdot 03}\right)^{\frac{x+y}{2}}$ from the stereotypes cast in the stamped machine moulds, and has the advantage of containing no printer's errors, either in the ages of the males in the vertical columns, or in the logarithms.

[NOTE. — 5 *is subtracted from the index of all the values of* $\lambda \, l_x \, l_y \, v^{\frac{x+y}{2}}$ *in the Machine to obtain* $\lambda \, D_{x,y}$.]

The ages of the females run along the head of the Table in a type differing from the machine type.

The logarithms of the column $N_{x,y}$ taken out in duplicate and carefully read, are inserted against those of column $D_{x,y}$; which will greatly facilitate the use of the Tables.

The second series of Tables (pp. 248–354) shows the numbers corresponding to the logarithms $D_{x,y}$. These numbers were first taken out to seven integral figures; but as the index of the logarithms fell, a certain number of decimals—never more than 4—was preserved.

There has been a tendency to multiply figures in the Tables of the columnar method, and this, besides misleading the student as to the degree of accuracy attainable in determining values by the Northampton and Carlisle Tables, incumbered pages of print, impaired the utility of the method, rendered processes less expeditious, and to some extent increased the chances of error. For this reason the numbers in the column $D_{x,y}$, of which the logarithms were carried down to the age 109 by the machine, have been kept within just limits, and the series has been closed at $D_{x,105}$, or $D_{y,105}$. The numbers at the ages after 100 and up to 105 are of no practical use, and are only inserted because they slightly affect the values of $N_{x,y}$ at the very advanced ages.

The order in which the columns are arranged should be carefully examined to facilitate reference.

The third series of Tables (pp. 356–425), containing the logarithms for the values of $D_{x,y}$ on two Male Lives, were arranged precisely on the same plan as the corresponding logarithms of $D_{x,y}$ on a Male and a Female Life. The logarithm in this set of $D_{20,40} = D_{40,20}$, and this somewhat facilitates reference, besides being an additional guarantee of accuracy.

The fourth series of Tables (pp. 426–479) gives the numbers corresponding to the logarithms $D_{x,y}$ for Two Males. These numbers were taken out to all the logarithms of the Two-Male Table, and the duplicate numbers were carefully compared. But the numbers only appear once in these Tables.

The fifth and sixth series of Tables (pp. 482–605) contain the $\lambda\, D_{x,y}$ and $\lambda\, N_{x,y}$, and also the corresponding numbers $D_{x,y}$ and $N_{x,y}$ for Two Female Lives, arranged in precisely the same order as those for Two Male Lives.

It will be right to mention here the precautions which were taken to secure accuracy. The logarithms of $D_{x,y}$ as produced by the machine were checked at every tenth age before the slips were stereotyped. After they were stereotyped the numbers $D_{x,y}$ corresponding with the logarithms were found, and then copied into the columnar form shown on page 248. The column

$N_{x,y}$ was next obtained, then the logarithms of the $N_{x,y}$, and these were finally copied into the form in which they appear on page 176.

Each of the above operations was performed by two persons working independently. At every successive step a careful comparison of their work was made, and errors were corrected before the next stage was proceeded with.

It is manifest that in so extensive a series of Tables as this volume contains, it would be unreasonable to expect absolute freedom from error; but it may be said, with confidence, that the most complete means available in this Department were used to insure accuracy.

Every figure (excepting those produced by the machine, which were checked at every tenth age) was checked in manuscript; and since the Tables have been in type, they have been twice carefully read with the manuscript.

We have supplied the means of detecting any possible error by giving all the data, and indicating every step of the several processes.

PART III.—ANALYSIS OF VALUES AS AFFECTED BY TIME, INTEREST, AND CONTINGENCIES OF LIFE OR OF COMMERCE: NOTATION.

Capital and its Price.

I propose now to state and to discuss briefly the fundamental conceptions on which the chief formulas in the subsequent sections are based, to define certain terms, and to explain the parts of the notation which are in any respects novel.

Capital in use naturally increases. Its value varies as well as the value of its increase; and the values are measured by money. The ratio of these values varies; and it is therefore necessary to agree on a scale for its admeasurement.

Let 100*l.*—either in gold, or in securities equally convertible—be the initial sum; then, as it can be immediately exchanged into stock, goods, houses, land, or machinery, which will return a profit, the loan of it is of use, and its services possess a value in the market. The price of its services is determined in the usual way by the parties contracting; and its service is paid for on the instant, or at the end of a stipulated time when the loan is to be repaid. In the former case the price is called *discount*, in the latter *interest.*

If the price of the sum agreed upon is £ 5 for a year's use, the discount or interest is said to be at the rate of 5 *per cent. per annum.* Now there are in this expression three elements brought into account: the amount of the sum (*per cent.*), the time (1 *year*), and the rate (5). Each of the three may vary; to measure the variation of the rate, the sum and the time must be fixed. The commercial world is agreed upon 100 as the sum, and upon 1 year as the unit of time.

For the sake of simplicity, the sum and the time are further reduced in analysis to absolute units; thus, in England, to *one* pound and *one* year.

The rate, thus modified, may be represented by i, which is generally a small fraction of the monetary unit. And the amount of money for which £ 1 is discounted for a year at the rate i is £ $(1-i)$, which may be named the initial value, the £ 1 being the terminal value; again, the amount of £ 1 at interest a year is £ $(1+i)$: so £ 1 is the initial value, and £ $(1+i)$ the terminal value. The sign £ may be omitted, or it may be replaced by the sign of any other monetary unit.

In discount £ $(1-i)$ is by agreement the *present value* of £ 1 due at the end of a year; *now* the value of a security of £ a is $a\ (1-i)$; *then* it will be worth £ a; while £ $a\ (1-i) = a - ai$; the ai is the discount of a; a being any number, integral or fractional.

By agreement, also, £ 1 at interest is *the present or initial value* of £ $(1+i)$ due at the end of the year; and £ a at interest is the initial value of £ a $(1+i)$ due at the end of the year. The borrower agrees to pay £ a $(1+i)$ at the end of the year for £ a in money, which the lender places in his hands, or places to his credit; ∴ as £ 1 down is the value of £ $(1+i)$ payable in 1 year; under the same conditions £ $\frac{1}{1+i}$ will be the initial value of £ 1 to be paid at the end of the year. It will amount at the given rate of interest to $\frac{1}{1+i} \times 1+i = 1$; and in this sense only it is called its present value in the doctrines of interest.

The initial value of a sum to be paid in this sense is determined entirely by the conventional rate of interest; and it varies with the rate of interest.

These expressions occur frequently in the doctrines of interest; and it will be convenient sometimes to put $r = 1+i$; and $\frac{1}{1+i} = v$.

The following expressions are also of frequent use: $d = 1 - v = 1 - \frac{1}{1+i} = \frac{i}{1+i}$. This is the difference between £ 1 due at the end of a year, and its present value. It is the *rebate*. Thus the *rebate* of £ 100, when interest is reckoned at 5 per cent., is £ 4·762; for the initial value of £ 100 is £ 95·238, as at 5 per cent. interest it will amount to £ 100 at the end of the year.

$\frac{1+i}{1+i} = 1 = \frac{1}{1+i} + \frac{i}{1+i} = v + d$. So $d = vi$ = the present value of £ i, as v is of £ 1.

The discount of £ 100, as has been explained, is by the universal custom of commerce, when discount is at the rate of 5 per cent., £ 5. So the discounter pays £ 95 for a bill of £ 100. It is singular that writers like Baily, of great acuteness, while admitting that the contracting parties are free to lend money at either 4 or 5 per cent., insist that £ 4·762 is the *true discount* in this case; and assert boldly that to deduct as discount £ 5 from £ 100 is "certainly neither correct nor just"! John Smart has published, and Baily has republished, a set of Discount Tables on this principle; but they are never used.

Now the rate of discount is the price agreed on by the buyer and seller, who understand each other perfectly*; for the rate of discount is expressed in the same simple terms as the rate of interest. The principle of admeasurement and the calculations are different; but they can be worked out in practice with the utmost scientific precision.

The charge of injustice is founded on the confusion arising when we include under rate of interest, the rate of profit arising from investments during the year.

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* In the language of commerce, Foreign Bills of Exchange are said to be *bought* and *sold*; the *discount* being the chief element of the *price*.

Thus, if interest is at 3 per cent., when it is convertible half-yearly, the profit is $3 \cdot 0225$; and at 5 per cent., under the same circumstances, the profit is $5 \cdot 0625$; which Baily calls the true rate of interest, and designates by ϱ in his classical work ; while with him $r = i$ is the symbol of what he names the *nominal rate* of interest. It will evidently be simpler to retain i, or the increase of £ 1 in one year at simple interest, as the symbol of the rate of interest, rather than $\left(1+\frac{i}{n}\right)^n - 1$; and to use some other symbol for the rate of profit.

Discount.

If the rate of discount be i, then $1-i$ will, if the security is perfect, be repaid by £ 1 at the end of the year, which is taken for the unit of time. Consequently every £ 1 employed will return $\frac{1}{1-i}$; for the return will be in proportion to the sum employed, and $1-i : 1 :: 1 : \frac{1}{1-i}$.

If the rate of discount is 5 per cent., the rate of profit, by discounting by the year, will be $\cdot 05263 = p$, or more than 5¼ *per cent.* per annum.

Let $1 + p = \frac{1}{1-i}$; then, upon developing this expression in a series, it becomes $1 + p = 1 + i + i^2 + i^3 + \ldots$ And $p = \frac{i}{1-i} = i + i^2 + i^3 + i^4 \ldots$ *ad infinitum.*

To interpret this, assume that £ 1,000,000 is employed in discounting at 4 per cent. per annum: then £ 960,000 will discount £ 1,000,000 of bills; and the £ 40,000 left will discount £ 40,000 and leave £ 1,600, which will discount £ 1,600 and leave £ 64 ; which will discount £ 64 and leave £ 2·56, which will discount £ 2·56 and leave £·1024, &c. &c. The total amount discounted by £ 1,000,000 will be,—

$$\begin{array}{r@{}l}
\pounds\,1{,}000{,}000 & \cdot \\
40{,}000 & \cdot \\
1{,}600 & \cdot \\
64 & \cdot \\
2 & \cdot 56 \\
 & \cdot 1024 \\
 & \cdot 004096 \\
 & \cdot 000164 \\
 & \cdot 000006 \\
\hline
\pounds\,1{,}041{,}666 & \cdot 666666 \\
\end{array}$$

Dividing the sum by 1,000,000, it is seen that each £ 1 realizes £ $1 \cdot 041\dot{6}$, or, at this rate of four per cent., £ ·96 discounts £ 1 ; and the £ ·04 discounts £ ·04, leaving £ $\cdot 04 \times \cdot 04$; which discounts £ $\cdot 04 \times \cdot 04$, leaving £ $\cdot 04 \times \cdot 04 \times \cdot 04$, and so on *ad infinitum ;* or universally by hypothesis the sum discounted by £ 1 is $1 + i + i^2 + i^3 \ldots\ldots i^\infty$.

The rate of discount differs from the rate of profit even when the rate i is low; and as it gets higher and usurious the difference grows rapidly; thus at 10 per cent. the profit rate is $11\frac{1}{9}$; for 20 per cent. it is 25 per cent.; at 50 per cent. it is 100 per cent.; and at 90 per cent. $p = \frac{\cdot 9}{1 - \cdot 90} = \frac{\cdot 9}{\cdot 1} = 9$; or the profit, if the security is perfect, will be 900 per cent. The difference between 90 and 900 suffices to show strikingly the difference between the rate of discount and the profit of discounting. From the nature of the case i can never, in discount, exceed 1, when the function is a maximum.

Discount in its first stage probably did not take *time* into account, but now the price is in the scientific sense proportional to the time, the rate, and the sum discounted. Thus the rate (i) being always per £ 1 per annum; and the time scarcely ever exceeding a year, but varying from $\frac{1}{365}$ of a year to $\frac{365}{365}$; the rate for the x^{th} part of a year is $\frac{i}{x}$; and the sum of money with which £ a is discounted is $s = a\left(1 - \frac{i}{x}\right) = a - \frac{i}{x}a$; of which $\frac{i}{x}a$ is the deducted discount; so $s + \frac{i}{x}a = a$.

The discount at different rates is correctly represented for the fractional parts of a year in Smart's Table of Interest.* His Discount Tables are inapplicable to actual transactions.

The annual rate of profit at any rate of discount for any constant term x is deducible from the equation,—

$$1 + p = \left(\frac{1}{1 - \frac{i}{x}}\right)^{x} = \left(1 - \frac{i}{x}\right)^{-x} = 1 + \frac{x}{1}\frac{i}{x} + \frac{x(x+1)}{1 \cdot 2}\frac{i^2}{x^2} + \frac{x(x+1)(x+2)}{1 \cdot 2 \cdot 3}\frac{i^3}{x^3} \dots$$

$$= 1 + \frac{x}{x}\frac{i}{1} + \frac{x(x+1)}{x^2} \cdot \frac{i^2}{1 \cdot 2} + \frac{x(x+1)(x+2)}{x^3} \cdot \frac{i^3}{1 \cdot 2 \cdot 3} \dots\dots$$

Here i is a fraction; and when $x = 1$ this function is at its maximum, decreasing until $x = \infty$, when it is a minimum, and

$$(1)\quad 1 + p = 1 + \frac{i}{1} + \frac{i^2}{1 \cdot 2} + \frac{i^3}{1 \cdot 2 \cdot 3} + \frac{i^4}{1 \cdot 2 \cdot 3 \cdot 4} \dots\dots$$

As $e^i = 1 + \frac{i}{1} + \frac{i^2}{1 \cdot 2} + \frac{i^3}{1 \cdot 2 \cdot 3} \dots\dots$ in the Napierian system of logarithms, i is the Napierian logarithm of the sum of the series, and k being the modulus of the common logarithm $ik = i \times \cdot 43429448$ is the common logarithm of $(1 + p)$. Thus $\lambda(1 + p) = i \times \cdot 43429448$.

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* Smart's "Tables of Interest," &c., pp. 10–25.

The values of p and i at various rates of discount and interest for successive moments of time can be compared in the annexed Table (XI.)

The longer the term of discount transactions the greater is the profit, when the security is perfect; while, on the contrary, the shorter the terms at which interest is convertible — interest accumulating on interest — the greater is the profit, as is shown in the Table (XII.) The profit on discounting is always greater at the same rates, *cœteris paribus,* than the profit on lending money at interest.

TABLE XI.—ANNUAL RATES OF PROFIT (p) per £ 1 at different Rates of DISCOUNT and INTEREST (i), when Interest is assumed to be convertible *momently.*

Rate of Discount or Interest (i).	Rate of Profit (p).	$\lambda(1 + p)$.
	£	
·03	·03045	0·0130288
·04	·04081	0·0173718
·05	·05127	0·0217147
·06	·06184	0·0260577
·07	·07251	0·0304006
·08	·08329	0·0347436
·09	·09417	0·0390865
·10	·10517	0·0434294

TABLE XII.—RATES OF PROFIT (p) per £ 1 at 3 and 4 per Cent. DISCOUNT or INTEREST (i).

		Rate of INTEREST *or* DISCOUNT (i).	
		·03	·04
		Rate of Profit (p).	
		£	£
INTEREST	Convertible YEARLY -	·03000	·04000
	„ HALF-YEARLY	·03023	·04040
	„ QUARTERLY -	·03034	·04060
	„ *Momently* -	*·03045*	*·04081*
DISCOUNT	„ QUARTERLY -	·03057	·04102
	„ HALF-YEARLY	·03069	·04123
	„ YEARLY - -	·03093	·04167

Interest, and the Present or Initial Value of Money at Interest.

When money is lent out for the x^{th} part of a year at the rate of interest i, the interest in that time is $\frac{i}{x}$; and for every £ 1 lent the sum repaid is $1 + \frac{i}{x}$; now assume that this is reinvested successively at the same rate without any loss of time, and the rate of profit at the end of the x^{th} period—that is, at the end of the year—is found by the equation,—

$$1 + p = \left(1 + \frac{i}{x}\right)^x = 1 + \frac{xi}{x} + \frac{x(x-1)}{x^2} \cdot \frac{i^2}{1 \cdot 2} + \frac{x(x-1)(x-2)}{x^3} \cdot \frac{i^3}{1 \cdot 2 \cdot 3} + \frac{x(x-1)(x-2)(x-3)}{x^4} \cdot \frac{i^4}{1 \cdot 2 \cdot 3 \cdot 4} \cdots\cdots\cdots$$

Passing in this case to the limit, if $x = 1$, the equation becomes $1 + p = 1 + i$; or making x infinite, the equation becomes, as did Equation 1. (p. xlix)—

$$e^i = 1 + p = 1 + \frac{i}{1} + \frac{i^2}{1 \cdot 2} + \frac{i^3}{1 \cdot 2 \cdot 3} \cdots\cdots$$

And $\lambda\,(1 + p) = i \times k$ as before. So when interest is assumed to be convertible momently, the profit is precisely the same as the profit by discounting momently. This must be so in the nature of the case; as the mathematical difference between payment at the beginning and at the end of a period disappears, when that period is an instant of time.

The six following series, placed in juxtaposition, show the nature of the functions :—

The annual profit on discounting £ 1 by the year.

$$(1.)\quad \frac{1}{1-i} = 1 + i + i^2 + i^3 + i^4 \cdots\cdots\cdots$$

The annual profit on discounting or lending out at interest £ 1, assuming the conversions to be momently ; $x = \infty$

$$(2.)\quad \left(1 + \frac{i}{\infty}\right)^{\infty} = 1 + \frac{i}{1} + \frac{i^2}{1 \cdot 2} + \frac{i^3}{1 \cdot 2 \cdot 3} + \frac{i^4}{1 \cdot 2 \cdot 3 \cdot 4} \cdots\cdots\cdots = e^i$$

The present value of £ 1 to be received at the end of the year, if interest be convertible momently ; $x = \infty$

$$(3.)\quad \left(1 + \frac{i}{\infty}\right)^{-\infty} = 1 - \frac{i}{1} + \frac{i^2}{1 \cdot 2} - \frac{i^3}{1 \cdot 2 \cdot 3} + \frac{i^4}{1 \cdot 2 \cdot 3 \cdot 4} \cdots\cdots\cdots = e^{-i}$$

When $x =$ any finite number, the series expresses the value of £ 1 to be received at the end of the year, the interest being convertible x times in the year.

$$(4.)\quad \left(1 + \frac{i}{x}\right)^{-x} = 1 - \frac{x}{1}\,\frac{i}{x} + \frac{x(x+1)}{1 \cdot 2} \cdot \frac{i^2}{x^2} - \frac{x(x+1)(x+2)}{1 \cdot 2 \cdot 3} \cdot \frac{i^3}{x^3} \cdots\cdots\cdots$$

The annual profit on £ 1 by discounting for the x^{th} part of a year, x times.

$$(5.)\quad \left(1 - \frac{i}{x}\right)^{-x} = 1 + \frac{x}{1}\,\frac{i}{x} + \frac{x(x+1)}{1 \cdot 2} \cdot \frac{i^2}{x^2} + \frac{x(x+1)(x+2)}{1 \cdot 2 \cdot 3} \cdot \frac{i^3}{x^3} \cdots\cdots\cdots$$

The profit in a year on £ 1 lent out on interest convertible x times.

$$(6.)\quad \left(1 + \frac{i}{x}\right)^{x} = 1 + \frac{x}{1}\,\frac{i}{x} + \frac{x(x-1)}{1 \cdot 2} \cdot \frac{i^2}{x^2} + \frac{x(x-1)(x-2)}{1 \cdot 2 \cdot 3} \cdot \frac{i^3}{x^3} \cdots\cdots\cdots$$

With regard to Equations 2 and 3; put $nx = n\infty$, and the sums of the series are known; for $\lambda\, s = nik$ when n is positive, and $\lambda\, s = -\,nik$ when n is negative. Thus—

$$\left(1 + \frac{i}{x}\right)^{nx} = 1 + ni + \frac{n^2\, i^2}{1 \cdot 2} + \frac{n^3\, i^3}{1 \cdot 2 \cdot 3} \cdot \cdot \cdot \cdot \cdot$$

$$\left(1 + \frac{i}{x}\right)^{-\,nx} = 1 - ni + \frac{n^2\, i^2}{1 \cdot 2} - \frac{n^3\, i^3}{1 \cdot 2 \cdot 3} \cdot \cdot \cdot \cdot \cdot$$

$$e^{ni} = 1 + \frac{ni}{1} + \frac{n^2\, i^2}{1 \cdot 2} + \frac{n^3\, i^3}{1 \cdot 2 \cdot 3} \cdot \cdot \cdot \cdot \cdot$$

$$e^{-\,ni} = 1 - \frac{ni}{1} + \frac{n^2\, i^2}{1 \cdot 2} - \frac{n^3\, i^3}{1 \cdot 2 \cdot 3} \cdot \cdot \cdot \cdot \cdot$$

When the interest is assumed to be reinvested with the capital at the end of every year, the capital increases; and as the amount of £1 is at the end of a year $1 + i$, this increasing in the same ratio becomes $(1 + i)^2$ at the end of two years; $(1 + i)^n$ at the end of n years.

£a in n years will therefore, on this hypothesis, increase to the sum $s = a\,(1 + i)^n$ in n years, and $\frac{s}{(1 + i)^n} = a$, the present value of s.

Putting 1 as the value at the beginning, then $(1 + i)^n = r^n$ will be the value at the end of the term of n years; so 1 may be called the initial value, r^n the terminal value. The ratio of the two values is $1 : r^n$; and for the same reasons that 1 becomes r^n, the $\frac{1}{r^n}$ will become £1 in n years; here $\frac{1}{r^n} = v^n$ is the initial value, and £1 is the terminal value.

The present value of any sum s payable in n years is $a = v^n\, s$; a being the initial, and s the terminal value. Thus at 3 per cent. interest, the present value of £1,000 due in 23 years is $506 \cdot 692 = \frac{1}{(1 \cdot 03)^{23}}\, s = v^{23}\, s = \cdot 506692 \times 1000$.

Conversely, $\frac{a}{v^{23}} = s$; and making the $a = 1000$, $s = \frac{1000}{\cdot 506692}$. By logarithms $\lambda\, s = \lambda\, 1000 - \lambda\, v^{23}$. As the values of all the most useful terms of v^n up to v^{109}, and their logarithms, are given in pp. 6–15; $\lambda\, r^n$ is immediately deduced from $\lambda\, v^n$, as the one is the arithmetical complement of the other; thus—

$$\lambda\, v^{23} = \bar{1}\cdot 7047438 = -\,0\cdot 2952562$$

$$\lambda\, r^{23} = 0\cdot 2952562$$

Time in which $s = 2a$.

In what time n will a be doubled $= 2a$ at any rates of discount (by one operation), of simple interest and of compound interest? These values are found by the following equations, as well as the correlative values of i when n is given.

(1.) Discount $\frac{1}{1 - ni} = 2 \quad \therefore n = \frac{1}{2i}$; and $i = \frac{1}{2n}$

(2.) Simple Interest $(1 + ni) = 2 \quad \therefore n = \frac{1}{i}$; and $i = \frac{1}{n}$

(3.) Compound Interest $(1 + i)^n = 2$

$$\therefore n \, \lambda \, (1 + i) = \lambda \, 2 \text{; and}$$

$$n = \frac{\lambda \, 2}{\lambda \, (1 + i)} \, ; \quad \lambda \, (1 + i) = \frac{\lambda \, 2}{n}$$

Discount never extends over such long periods, neither as a rule is simple interest allowed to remain so long dormant; but the values are added for the sake of comparison in the subjoined Table (XIII.), taken, with the exception of the Discount column, from Baily's work.*

The period of doubling at simple interest is $= \frac{1}{i}$; and for all the lower rates of compound interest the period of doubling $= \frac{1}{i} \times {\cdot}7$ nearly, while the doubling period by discount is $\frac{1}{i} \times {\cdot}5$.

TABLE XIII.—PERIOD OF DOUBLING CAPITAL AT SIMPLE AND COMPOUND INTEREST, AND AT DISCOUNT.

Rate (i).	Period of doubling Capital.		
	Simple Interest ($\frac{1}{i}$)	Compound Interest.	Discount (one operation) ($\frac{1}{2i}$)
·02	50·000	35·003	25·000
·03	$33{\cdot}33\dot{3}$	23·450	$16{\cdot}66\dot{6}$
·04	25·000	17·673	12·500
·05	20·000	14·207	10·000
·06	$16{\cdot}66\dot{6}$	11·896	$8{\cdot}33\dot{3}$
·07	14·286	10·245	7·143
·08	12·500	9·006	6·250
·09	$11{\cdot}11\dot{1}$	8·043	$5{\cdot}55\dot{5}$
·10	10·000	7·273	5·000

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* F. Baily, "Doctrine of Interest," &c., 1808, p. 95.

Annuities; Perpetuities.

The value of several future payments is readily determined; as it is the aggregate value of each payment taken separately. Thus the value of £ a, £ b, £ c, to be received at the end of 3, 7, and 17 years, is at (i) any given rate of interest $\frac{a}{(1+i)^3} + \frac{b}{(1+i)^7} + \frac{c}{(1+i)^{17}}$; which is more concisely expressed by $s = av^3 + bv^7 + cv^{17}$; if $a = b = c$ then $s = a\,(v^3 + v^7 + v^{17})$. If the intervals of time x are equal, $s = a\,(1 + v^x + v^{2x} + v^{3x} \ldots\ldots)$; and the series v^{nx} is a geometrical progression, which can be summed in the usual way. This is a periodical payment, but it is not an annuity.

An annuity is a series of equal payments, made either yearly, half-yearly, quarterly, or in some other fractional part of a year; and it is generally called in the last case an annuity of £ a, payable by n^{ly} instalments. Its value varies with its amount, with the rate of interest or its periods of conversion, and with the time during which the annuity is payable wholly or in instalments.

Annuities—like rents—and the government perpetual annuities, are purchased at the time the rents or dividends are due, immediately after they are paid, or at any intervening instant; and as sellers of estates for various reasons generally received the rents before the sale, it became customary to value the annuity immediately after the first instalment was paid. For some purposes this is convenient; for other purposes, and particularly in many logarithmic calculations connected with insurance, the value of the annuity is required immediately before the first instalment is due. By taking all values of annuities at the instant an instalment is due, an annuity deferred n years is an annuity of which the first payment is due at the end of n years. And by deducting 1 from the initial value, the value of the annuity, first payment at the end of the year, is immediately obtained.

In the old style of locution an annuity deferred n years was said to be entered on at the end of n years, a phrase requiring a good deal of explanation, and then only intelligible by suggesting that the first instalment is due a year afterwards.

The rate of interest (i) being given, the value of x payments of an annuity of £ a for x years is found by summing the series $\frac{1}{(1+i)^x} = v^x$; making x vary from 0 to $x-1$. Thus, $s = a\,(1 + v^1 + v^2 \ldots\ldots v^{x-1}) = \mathrm{V}_{x-1} = a\,\frac{1+i}{i}\,(1-v^x)$. If $a = 1$ this becomes $\frac{1+i}{i}\,(1-v^x) = \mathrm{V}_\infty\,(1-v^x) = \mathrm{V}_{x-1}$, the value of the perpetuity, multiplied by the difference between £ 1, and the initial value of £ 1 to be paid at the end of x years: and if, further, x become infinite $= \infty$; $s = \frac{1+i}{i} = \mathrm{V}_\infty$.

But $V_\infty - v^x V_\infty = V_{x-1} \therefore V_\infty - V_{x-1} = v^x V_\infty$; and consequently the value of an annuity for x years being known, the value of the reversion of that annuity is also known. The first payment of the Reversionary Annuity is made at *the end of the* x^{th} = the *beginning of the* $x+1^{th}$ *year.* The value of the reversion is also derived directly from the Equation $s = av^x \frac{1+i}{i}$.

When the annuity is payable at the end of the first and of each of x years, $s = \frac{a}{i}(1-v^x)$; or if $a = 1$ it becomes $s = \frac{1}{i}(1-v^x) = \frac{1}{i} - \frac{v^x}{i}$. And when $x = \infty$ the last term disappears, so $s = \frac{1}{i}$ = the value of a perpetuity of £ 1 ; that is, of £ 1 payable at the end of the first and of every future year. The value of the reversion of £ 1 a year so paid for ever is $\frac{1}{i} v^x$.

When interest at the rate i is convertible n times in the year, and the annuity of £ a is payable at the same n times, the value of the annuity of £ a for x years is expressed in this series:

$$s = a\left\{(1 + \frac{1}{1+\frac{i}{n}} + \frac{1}{\left(1+\frac{i}{n}\right)^2} \cdots\cdots \frac{1}{\left(1+\frac{i}{n}\right)^{nx-1}}\right\}$$

$$= a\,\frac{n+i}{i}\left\{1 - \frac{1}{\left(1+\frac{i}{n}\right)^{nx}}\right\}$$

When $x = \infty$ this gives the values of the perpetuity: $s = a\,\frac{(n+i)}{i} = a\left(\frac{n}{i}+1\right)$. When $a = 1$ the $s = \frac{n}{i} + 1$; and if $a = \frac{1}{n}$ the $s = \frac{1}{i} + \frac{1}{n}$. The $\frac{1}{n}$ is the first instalment, and depends on n. Hence it follows that the value of an annuity of £ 1, of which the n^{th} part is payable at the *end of every* n^{th} *part* of a year, is independent of the value of n ; and upon this hypothesis an annuity of £ 1 a year for ever is of the same value, whether it be payable quarterly, half-yearly, or yearly.

Thus, an annuity of £ 2 payable at the end of every half-year is worth 50 half-year's purchase ; and an annuity of £ 4 payable at the end of every year is worth 25 years' purchase. But $2 \times 50 = 4 \times 25 = 100$.

How happens it that if the rents have just been paid, an estate of which the rents are payable yearly is worth the same as the rents of the same estate payable half-yearly; when it is obvious that here the interest on half a year's rents may be realized every year, in addition to the rent itself? The answer to this is, that the value is the sum in both cases of the separate values of each future rent, at the times those rents fall due: upon two distinct hypotheses, each of which, however, leaves out of account any possible future increment derivable from the investment of the rents. In the one case the hypothesis is that £ 100 of value will yield a rent of £ 2 half-yearly; and in the other, that it will yield £ 4 yearly; and in either case it is unallowable to change the hypothesis in interpreting the formula.

This is an illustration of the discrepancies in the doctrines of interest that exist among illustrious mathematicians. Of course the difference does not arise in any question of the mechanism of analysis, but in the original hypotheses, and in the definitions of symbols.

Values at constant Risk.

In annuities certain no contingency is taken into account; and their values are the sums of the initial values of terminal sums—upon the hypothesis of no risk and of a certain rate of increase. If the annuity certain is to continue, if it is deferred, or if it is to intermit—for any definite time—its value is shown by the Tables, or is immediately deduced from the formulas.

Some annuities flow apparently from perennial sources; and the probability of their drying up—in their scientific valuation—is neglected. The English 3 per cent. annuities, and annuities secured by land, are in this category; yet it is well known that their value fluctuates in any periods of public alarm. 5 and 4 per cent. annuities are exposed to the further risk of reduction. And, in fact, no future payments, whether single or periodical, are absolutely certain; and I shall now show how the risk can be either explicitly or implicitly expressed analytically.

Of the moneys advanced at discount or interest on different classes of securities, as well as of all values at risk, the losses can be determined by observation; but such observations have hitherto been registered in few cases; and the risks estimated by the sagacity derived from experience in business, are covered by additions to the rates of discount and interest.

Let the proportional amount per £ 1 per annum that *fails* to be paid out of an expected sum be f; then $1 - f = c$ will be the proportional amount per pound to be expected from parties whose *credit* remains unshaken. The reduced value of the sum expected (s) will be $(1 - f)\, s$.

c will measure the credit of the payer; f will be the fraction of discredit, and will express the probability of failure.

c expresses the probability of payment; and if taken correctly upon a large number of cases the average sum £ ca is almost certainly realized; but in single transactions ca is only the value of the chance of receiving the sum a. Thus A discounts £ 100 by advancing £ 95 at the risk $f = \frac{1}{105}$; then, although there are 104 chances in favour of his gaining £ 5, he may lose the expected £ 100 by the transaction; for there is one chance in favour of his losing.

This speculative element can be investigated; but it is only of importance in its effects on the fortune of the discounter. It does not directly affect the values, which are now in question.

Discount at Risk.

Let s be the sum discounted; then at the risk f the value of this sum will be $(1-f)\,s$ = the terminal value of the sum to be realized. But at the rate i the £s is discounted for $(1-i)\,s$. $\therefore \dfrac{(1-f)\,s}{(1-i)\,s} = 1+p$; the p being the rate of profit on such transactions. Assume that the risk and the interest are exactly proportional to the time; for instance, that $\dfrac{f}{2}$ = the risk of loss in half a year; as $\dfrac{i}{2}$ is the discount for half a year; then the annual rate of profit will be found by the general equation,—

$$\left(\frac{1-\dfrac{f}{x}}{1-\dfrac{i}{x}}\right)^x = \frac{\left(1-\dfrac{f}{x}\right)^x}{\left(1-\dfrac{i}{x}\right)^x} = \left(\frac{x-f}{x-i}\right)^x = 1+p.$$

If the transactions are annual, $x=1$; and this becomes $\dfrac{1-f}{1-i} = 1+p$; and if they are assumed to be momently $x=\infty$, so then the equation becomes $\dfrac{e^{-f}}{e^{-i}} = \dfrac{e^{i}}{e^{f}}$. In the latter case *hyp. log.* $(1+p) = i-f$; or $i-f$ is the hyperbolic logarithm of $1+p$. And $\lambda\,(1+p) = (i-f)\,k$ = the common logarithm. Example: Discount for 1 year: put $1-f = (1+p)\,(1-i) = 1{\cdot}03 \times {\cdot}95 = {\cdot}9785 = 1 - {\cdot}0215$ in the equation $\dfrac{1-f}{1-i} = 1+p$; and $\dfrac{{\cdot}9785}{{\cdot}9500} = 1{\cdot}03$. Thus, when the risk is 2·15 per cent., the rate of 5 per cent. discount returns on one yearly transaction a probable profit of 3 per cent. on the capital.

If the transactions are assumed to be momently $\lambda\,(1+p) = ({\cdot}0500 - {\cdot}0215) \times {\cdot}43429448 = {\cdot}0123774$; and the annual rate of profit is 2·891 instead of 3·000 per cent. The values of p when x is any intermediate number between 1 and ∞ lie between the limiting numbers. The more frequent the transactions, even when there is risk, the less is the profit, if the risk remain invariable.

The risk is not constant in personal credit, which fluctuates; and the advantage of frequent transactions is, that the discounter reviews the credit of the names on every bill at the moment of discount; he thus is in the position an insurance office would occupy, if it had every three months, or every week, the power of getting rid of all its policies on sick lives.

The value of i to yield a given rate of profit p at the given risk f, in x transactions annually, is immediately deduced from the general equation.

$$\text{If } x = 1 \text{ then } i = \frac{p+f}{1+p}.$$

Interest at Risk.

When money (a) is at interest, the rate being i, and the risk f, the probable sum (s) to be received at the end of the year is evidently $a\ (1-f)\ (1+i) = s$. $\therefore (1-f)\ (1+i) = \frac{s}{a} = 1+p$, where p, being the probable profit in a year on £1, is the rate of profit. And $i = \frac{1+p}{1-f} - 1 =$ the rate of interest, by which the probable rate of profit will be p when the risk is f. Let $f = \frac{q}{1+p+q}$,

$$\text{then } c = 1 - f = \frac{1+p}{1+i} = \frac{1+p}{1+p+q}, \text{ and } \therefore\ i = p + q, \text{ or } i - p = q$$

$$f = 1 - c = 1 - \frac{1+p}{1+i} = \frac{i-p}{1+i} = \frac{q}{1+i} = \frac{q}{1+p+q}$$

Thus when the profit rate is only $p = \cdot 03$, and the interest rate is $i = \cdot 05 = \cdot 03 + \cdot 02$; then $c = \frac{1 \cdot 03}{1 \cdot 05}$; and $f = \frac{\cdot 02}{1 \cdot 05} = \cdot 0190476$.

Example: Let £10500 be lent in equal proportions of £100 to 105 persons at 5 per cent. interest; then if none fail to pay, the profit will be £525, or at the rate of 5 per cent. 11025 will be returned; but the risk being $\frac{2}{105}$, there will be a probable loss of £210 by two failures, and the profit will be $525 - 210 =$ £$315 = 10500 \times \cdot 03$ = to the profit at 3 per cent. interest, when the security is perfect or when $1 - f = c = 1$.

It is evident on inspection, as $c\ (1 + i) = 1 + p$, that to realize a given rate of profit the value of i must vary inversely with c. Thus if the profit is to be at the rate of 3 per cent. when the risk of failure is $\frac{1}{104}$, the rate of interest must be 4 per cent; when the risk is $\frac{2}{105}$ the interest must be 5 per cent.; when the risk is $\frac{3}{106}$ the interest must be 6 per cent. For to make $c\ (1 + i) = 1 + p$ it suffices to put $c = \frac{1+p}{1+i} = \frac{1+p}{1+p+q}$; or $f = \frac{i-p}{1+i} = \frac{q}{1+p+q}$.

When interest is convertible x times in the year, the rate of profit is increased; and if the interest and the risk are proportional to the time, the general equation becomes,—

$$1 + p = \left(1 - \frac{f}{x}\right)^x \left(1 + \frac{i}{x}\right)^x$$

This function is at its maximum when $x = \infty$; for when the transactions are momently it becomes $1 + p = \frac{e^i}{e^f}$; and $\lambda\ (1 + p) = (i - f)\ k = (i - f) \times \cdot 43429448$.

Thus if $f = \frac{\cdot 02}{1 \cdot 05}$, and $i = \cdot 05$, the $\lambda\,(1 + p) = \left(\cdot 05 - \frac{\cdot 02}{1 \cdot 05}\right) k = \frac{\cdot 0525 - \cdot 0200}{1 \cdot 05}$ $\times \cdot 43429448 = \frac{\cdot 0325}{1 \cdot 05} \times \cdot 43429448 = \cdot 0134425$; and $p = \cdot 03144$, so the profit is 3·144 per cent. in the year.

The profit on one transaction in the year at the same rates of interest and of risk is 3 per cent.

Initial Value of Sums at Risk.

The initial value of £1 to be paid with certainty when the rate of profit is p is $v_1 = \frac{1}{1 + p}$; which becomes $\frac{1 - f}{1 + p} = v_1 c$, when the rate of risk to which it is exposed is f; or dividing each term by $1 - f$ and putting $\frac{1 + p}{1 - f} = 1 + i$, we have the $\frac{1 - f}{1 + p} = \frac{1}{1 + p} - \frac{f}{1 + p} = \frac{1}{1 + i} = v_2$; which includes implicitly the expression both of risk and increase. Here—

$$f = \frac{i - p}{1 + i};\ c = \frac{1 + p}{1 + i};\ p = ci - f.$$

If the profit on £1 is $\frac{p}{x}$ in the x^{th} part of a year when the risk is $\frac{f}{x}$; the initial value of £1, which is engaged in x transactions during the year, will be $\frac{\left(1 - \frac{f}{x}\right)^x}{\left(1 + \frac{p}{x}\right)^x} = \frac{1}{1 + i}$; which when $x = 1$ is $\frac{1 - f}{1 + p}$. And when $x = \infty$ is $\frac{1}{e^f\, e^p} = e^{-(f + p)} = \frac{1}{1 + i}$; $\therefore$ when the transactions are assumed to be momently, or in this case—

$$\lambda \left(\frac{1}{1 + i}\right) = -\,(f + p)\,k.$$

Putting $f = \cdot 02$, and $p = \cdot 03$; this becomes $-\,(\cdot 05 \times \cdot 43429448) = -\,\cdot 0217147$; and $\lambda \left(\frac{1}{1 + i}\right) = \bar{1} \cdot 9782853$. The $1 + i = 1 \cdot 05127$, and $\frac{1}{1 + i} = \cdot 95123$; and when the transaction is annual the corresponding values are nearly the same for $1 + i = 1 \cdot 05102$; and $\frac{1}{1 + i} = \frac{\cdot 98}{1 \cdot 03} = \cdot 95146$, when $p = \cdot 03$, and $f = \cdot 02$.

Annuities at constant Risk.

The annuity being £1, the initial value of the first payment is £1, as $1 - \frac{f}{\infty} = 1$. The initial value of the £1 payable at the end of the *first* year is $\frac{1 - f}{1 + p} = \frac{\frac{1}{1 + p}}{1 - f} = \frac{1}{1 + i} = cv_1$.

The initial value at the beginning of the second year of the £ 1, contingently payable at its end, is $v_1 c$; of which the present value at the beginning of the first year is $v_1^2\, c^2$. For in order to pay the second £ 1 the validity of the fund must have survived the two periods, of which the compound chance is cc, assuming the risk in each year to be equal. The same kind of reasoning applies to the third year, and to every subsequent year. So $V_n = 1 + cv_1 + c^2\, v_1^2 + c^3\, v_1^3 \;.\;.\;.\; c^n\, v_1^n$.

Putting $cv_1 = \frac{1 + p}{1 + p + q} \times \frac{1}{1 + p} = \frac{1}{1 + p + q} = \frac{1}{1 + i} = v$, this becomes the ordinary series—

$$V_{n-1} = 1 + v + v^2 + v^3 \;.\;.\;.\; v^{n-1} = \frac{1 + i}{i} - \frac{v^n}{i} = \frac{1 + p + q}{p + q} - \frac{v^n}{p + q}$$

Hence it follows that an annuity which is assumed to be at *constant risk*, can be valued by the same methods as an annuity certain; it being only necessary to select a rate of interest high enough to cover the risk, and to fulfil the conditions of the equation $v = \frac{1}{1 + i} = \frac{1 - f}{1 + p}$; the p representing the rate of interest when there is no risk, and f the rate of risk.

Thus when $f = \cdot 019048$ we have $q = \cdot 02$ and $p = \cdot 03$, so the $i = \cdot 05$.

$$\frac{\cdot 980952}{1 \cdot 03} = \frac{1}{1 + i} = \frac{1}{1 \cdot 05} = \cdot 952381.$$

And the 5 per cent. annuity is the value of an annuity at risk; which if there were no risk would be worth the corresponding values in the 3 per cent. Table.

The Tables $V_x - 1$ at the various rates of interest, therefore, serve to value annuities at several rates of risk and interest. Thus, if the perpetuity, or an annuity certain of £ 1 payable at the end of every year for ever, is worth £ $33\frac{1}{3}$, and $p = \cdot 03$; an annuity at the risk $\frac{\cdot 01}{1 \cdot 04}$ is worth $\frac{1}{\cdot 03 + \cdot 01} = \frac{1}{\cdot 04} =$ £ 25; an annuity of £ 1 at the risk $\frac{\cdot 02}{1 \cdot 05}$ is worth $\frac{1}{\cdot 03 + \cdot 02} = \frac{1}{\cdot 05} =$ £ 20; and the same annuity at the risk $\frac{\cdot 03}{1 \cdot 06}$ is worth $\frac{1}{\cdot 03 + \cdot 03} = \frac{1}{\cdot 06} = 16 \cdot \dot{6}$. Universally, when the risk is $\frac{q}{1 + p + q}$ the value of the perpetuity is $\frac{1}{p + q} = \frac{1}{i}$.

So if the rate of interest without risk is p, and the risk is $\frac{i - p}{1 + i} = f$, the value of the perpetuity is $\frac{1}{p + (i - p)} = \frac{1}{i}$; and the annuity for any term of years is valued by the $(100 \times i)$ per cent. Table, or by the correlative formula. Thus if the rate of interest at no risk is 4 per cent., and the risk is $\frac{\cdot 05 - \cdot 04}{1 \cdot 05} = \frac{\cdot 01}{1 \cdot 05}$, the valuation is by the 5 per cent. Table.

When an annuity of £ 1 a year is worth £ $33\frac{1}{3}$, any annuity of £ a for ever is said to be worth $33\frac{1}{3}$ years' purchase. If $a =$ £ 100, the perpetual annuity is worth £ $3333\frac{1}{3}$; its value falls to £ 2500 at the risk $\frac{1}{104}$; to £ 2000 at the risk $\frac{2}{105}$; to £ $1666\cdot\dot{6}$ at the risk $\frac{3}{106}$; to £ 1000 at the risk $\frac{7}{110} = \frac{i-p}{1+i}$.

The value of the 3 per cent. annuity is thus reduced as the risk becomes $\frac{1}{104}, \frac{2}{105}, \frac{3}{106}, \ldots \frac{7}{110}$; to $\frac{3}{4}, \frac{3}{5}, \frac{3}{6}, \ldots \frac{3}{10}$, of the value at no risk. Thus, if the perpetuity at no risk is worth $\frac{1}{p}$, its value at the risk $f = \frac{q}{1+p+q}$ becomes $\frac{1}{p} \times \frac{p}{p+q} = \frac{1}{p+q}$.

The annuity of £100 at the yearly risk of $\frac{1}{104}$ is equivalent in value to £75 a year at no risk, assuming p to be $\cdot 03$; for $75 \times 33\frac{1}{3} = 100 \times 25$; $75 \times \frac{1}{\cdot 03} = 100 \times \frac{1}{\cdot 04}$. Thus by paying in insurance a premium of £ 25 a year out of the annuity, the rest, or the £ 75, is enjoyed without risk. If the risk is less the premium is diminished. (See p. cxii.)

Thus by the artifices of insurance, irregular risks, like those from fire or hail, or the seas, or lapses of integrity, can be commuted into equivalent constant rates, of which the effect on annuities for terms of years, or in perpetuity, can be determined.

Annuities at Risks varying regularly (*Demoivre's Hypothesis*).

Let the probability that £ 1 will be paid by A at the end of a year be $\frac{99}{100}$; and the probability at the beginning of the second year that he will pay the same sum at the end of that year be $\frac{98}{99}$; and so let the probability of payment decrease in the ratio of $\frac{97}{98}, \frac{96}{97}, \frac{95}{96}$, to $\frac{2}{3}$, and $\frac{1}{2}, \frac{0}{1}$. Then the initial value of an annuity dependent upon these varying contingencies will be thus determined:

$$A_n = \frac{v^0(n-0) + v^1(n-1) + v^2(n-2) \;.\;.\;.\;.\; + v^m(n-m) \;.\;.\;.\;.\; + 1 \,.\, v^{n-1}}{n}$$

According to this hypothesis 1 out of the number n will fail every year until the n have all failed; and the probability that any one will fail in any particular year is $\frac{1}{n}$; while the probability of failing in m years is $\frac{m}{n}$, and the probability of not failing in m years is $\frac{n-m}{n} = 1 - \frac{m}{n}$. Thus n and m being any numbers, 10 and 3 for example, then $\frac{n-m}{n} = \frac{10-3}{10} = \frac{7}{10} = 1 - \frac{3}{10}$ = the probability of not failing; while $\frac{3}{10}$ is the probability of failing in 3 years.

The above series is divisible into two, as will be evident on inspection:

$$\begin{aligned} A_n &= n\,(1 + v^1 + v^2 + v^3 \ldots + v^{n-1}) \\ &\qquad - (1\,v^1 + 2\,v^2 + 3\,v^3 \ldots + (n-1)\,v^{n-1}) \\ &= V_\infty\left\{1 - \frac{(V_n - 1)}{n}\right\} = \frac{1+i}{ni^2}(ni + v^n - 1) = \frac{1+i}{i}\left\{1 - \frac{(1-v^n)}{ni}\right\} = \end{aligned}$$

the value of an annuity of £ 1 payable at the beginning of every year to any one designated of the number n, so long as he shall survive.

When $n = 1$ this becomes 1; and when $n = \infty$ it becomes $V_\infty = \frac{1+i}{i}$ = the value of a perpetuity, which is the limiting value. It is evident, in fact, that the value of the annuity is regulated by the rates of interest and risk; and that when $n = 1000000$ this series,

$$\frac{1000000}{1000000} + \frac{999999}{1000000}\,v + \frac{999998}{1000000}\,v^2 \;\ldots\;.$$

so long as v is less than unity, will, as n is augmented, constantly approximate to the series,

$$V_\infty = 1 + v^1 + v^2 \;\ldots\ldots\; v^\infty.$$

By making n greater or smaller the series serves, therefore, to determine values depending on interest and on different degrees of risk; so it admits of extensive application. The Table 7. (p. clii) has been constructed to illustrate its uses. The series $D_n + D_{n+1} + D_{n+2} \ldots\ldots$; the n being any number, consists of the terms $nv^m + (n-1)\,v^{m+1} \ldots\ldots$; consequently,

$$\frac{nv^m + (n-1)\,v^{m+1} + (n-2)\,v^{m+2}}{nv^m} \;\ldots\ldots$$

$= A_n = \frac{N_n}{D_n}$ = the value of an annuity of £1, subject to the risks $\frac{n-1}{n}, \frac{n-2}{n-1} \ldots$

Thus at 3 per cent. interest the value of a perpetuity at no risk is $34\frac{1}{3}$ years' purchase; and the value of

$$A_{30} = \frac{N_{30}}{D_{30}} = 11 \cdot 901\,;\; V_{29} = 20 \cdot 188$$

$$A_{10} = \frac{N_{10}}{D_{10}} = \;\; 5 \cdot 043\,;\; V_9 = \;\; 8 \cdot 786.$$

Demoivre, by a stroke of genius, happily applied this series, when data were defective, to the determination of the values of life annuities. He assumed 86 to be the term of human life; and called $86 - x = n$, the *complement of life.*

Although the use of the series for this purpose is superseded, it may admit of application to other risks; and the columnar method greatly increases the range of its utility. Thus the following are two examples:

$$\frac{N_{110} - N_{105}}{D_{110}} = \frac{110 + 109v + 108v^2 + 107v^3 + 106v^4}{110}$$

$$\frac{N_{20} - N_{15}}{D_{20} = 20v^{90}} = \frac{20v^{90} + 19v^{91} + 18v^{92} + 17v^{93} + 16v^{94}}{20v^{90}}$$

$$= \frac{20 + 19v + 18v^2 + 17v^3 + 16v^4}{20}$$

The first gives the value of an annuity for 5 years, at slightly increasing risk, commencing at 109 to 1; the latter to an annuity for 5 years, at greater risk, beginning at 19 to 1, and descending to 16 to 4, or 4 to 1. Certain risks may thus be treated, but efforts should be incessantly directed to the determination of the law of risk in each particular class of transactions.

Thus the Fidelity Guarantee may be treated; and the single or annual premium may be determined, on the hypothesis of constant or variable risks, corresponding with appreciations of character and of exposure to forfeiture.

When $A_x =$ the value of a life annuity, and p are given, we have from the equation $\frac{1}{p + q} + 1 = A_x$, the value of $q = \frac{1}{A_x - 1} - p$; and $f = \frac{q}{1 + p + q}$ = the uniform annual risk, which remaining constant to the end would at the rate of interest p give the annuity at uniform risk the same value as that of the life annuity at variable risk.

Thus an annuity of £1 on X, a single male life, age 20, interest 3 per cent., is worth 22·0612, or if payable at the end of every year that X shall live 21·0612; so $\frac{1}{21 \cdot 0612} = \cdot 047481 = p + q = i = a$. And $i - p = \cdot 047481 - \cdot 03 = \cdot 017481 = q$; but $\frac{q}{1 + i} = \frac{\cdot 017481}{1 \cdot 047481} = \cdot 016689 = f$; which corresponds with the μ_{47} of the Life Table, as $c = 1 - f = 1 - \cdot 016689 = \cdot 983311$ corresponds with the probability of living a year at that age. The probability of living a year varies at every year of age; but if it were to remain uniform through life, the numbers living would form a descending geometrical progression, and so would the series representing the values of life annuities.

The value of $A_{20} = 22 \cdot 0612$ corresponds nearly with that of the annuity by Demoivre's method, against the age which has 86 for its complement; and the probability of living corresponds with that of 59·92 for complement in his series.

Compound Risks; Partial Risks.

Compound risks can be reduced to equivalent simple risks; thus, let the chances that X will fail to pay £ 1 be f_1; that Y, who is independent of X, will fail, be f_2; and that Z, also independent, will fail, be f_3; then the chance that neither of the three will pay is $(1 - f_1 \cdot f_2 \cdot f_3)$; consequently the value of a bill for £ a which the three are severally liable to pay is $a\,(1 - f_1 f_2 f_3)$. If the chances in favour of the three are respectively 8 to 1, 9 to 1, and 10 to 1, then this expression becomes $a\left(1 - \frac{1}{9} \cdot \frac{1}{10} \cdot \frac{1}{11}\right) = a\left(1 - \frac{1}{990}\right) = a\,\frac{989}{990}$. If the bill were for £ $990 = a$, then, leaving out the element of interest, £ 1 would cover the risk; while £ 11 would cover the risk if the credit of only X and Y were engaged; and £ 110 would be required to cover the risk if the bill rested exclusively upon the credit of X. But put $f_1 \cdot f_2 \cdot f_3$, as in the example $= f$, and the compound is susceptible of the same treatment as the simple risk.

If the failure of X involves the failure of Y, and conversely, the events are not independent, and are treated as single risks, or as only partly independent.

When the ability of X to pay depends upon his being previously paid by Y, and also on Y being previously paid by Z, several cases arise. Thus if X and Y will certainly pay if they are previously paid by Z, but otherwise fail, then the risk is f_3 only, and the value of £ a subject to such risk is $(1 - f_3)\,a$, which may be expressed more simply by $c_z\,a$; if the ability of Y to pay, even if paid by Z, is uncertain, and the probability that in that contingency he will pay is c_y, the value is further reduced to $c_y \cdot c_z \cdot a$; furthermore, if upon Y and Z paying X, the probability that he will then pay the bill to which his name is attached be c_x, the value will be reduced to $c_x \cdot c_y \cdot c_z \cdot a$. Thus, if these compound chances were $\frac{8}{9}$ and $\frac{9}{10}$ and $\frac{10}{11}$, the bill being for £ 990, its value would be $\frac{720}{990} \cdot 990 =$ £ 720.

If a bill is not paid when due, or is only paid in part, it is a case of partial loss. The risk of partial losses is expressible by the methods which have been described; thus, let it be equally probable in the case of loss that the loss will be total or infinitesimally small, or any intermediate value, then, if the loss be estimated at $f_1\,\frac{a}{2}$, the probability of losing the whole being $\cdot 10 = f_1$, the probable loss $\cdot 10\,\frac{a}{2} = a \times \cdot 05 = \frac{f_1}{2}\,a$. If the sum were £ 990 its value would be $990\,(1 - \cdot 05) = \cdot 95 \times 990 = 940 \cdot 50$. The premium £ 49·500 would cover the loss. This case comes under the general rules by making $\frac{f_1}{2} = f$.

To generalize the principles which have been discussed, let credit—or the confidence which is placed in the promise to pay a sum of money either absolutely at a given time or on the happening of a given event—be expressed analytically by unity if it is perfect; and the various degrees of credit by fractions; its symbol being c. Then c will vary from 1 to 0. And let $1 - c = f =$ the estimated risk, or the chance that the money will not be paid, f will vary inversely; and in all cases $1 = c + f$.

Securities may be classed; and if we refer X to a class of the credit c_x, we shall have the equation (1) $1 = c_x + f_x$; (2) and $1 = c_y + f_y$ will be applicable to Y; (3) and $1 = c_z + f_z$ will be applicable to Z under the same circumstances. Multiplying the first and second together, the equation (4) or $c_x c_y + c_x f_y + c_y f_x + f_x f_y$ exhibits the chances that the credit of both X and Y will stand $(c_x c_y)$; that X only will stand and Y only fail $(c_x f_y)$; that Y only will stand, X only fail $(c_y f_x)$; and finally that both X and Y will fail, $f_x f_y$. In the same manner the third element Z may be introduced. If the credit of all parties be taken to be equal $c = c_x = c_y = c_z$; then the function may be developed binomially.

$$(c_x + f_x)^3 = c_x^3 + 3\, c_x^2 f_x + 3\, c_x^1 f_x^2 + f_x^3.$$

And universally,

$$(c_x + f_x)^n = c_x^n + \frac{n c_x^{n-1}}{1} f_x + \frac{n\,(n-1)}{1 \cdot 2} c_x^{n-2} f_x^2 \ldots\ldots + f_x^n.$$

As $f_x^n =$ the chances that all will fail; $1 - f_x^n =$ the chances that at least some one will not fail to meet the engagement in which the combined credit is engaged. If $f =$ probability that all will fail out of n persons of equal credit $= c_x$; then as $f = f_x^n$ it follows that $f^{\frac{1}{n}} = f_x =$ the chance that any one X will fail. So if $f = \frac{1}{1000} = f_x^3$, then $f^{\frac{1}{3}} = \frac{1}{10}$. Thus is explained the rapid diminution of chances of loss in securities by the addition of every name, when the credit of each name is good and independent.

There is another great class of risks which extend over long periods of time, and vary, as they depend upon the life or death of one or more persons, in different orders; and their probable degrees of variation can be determined by observation. The present volume refers to this class of cases, which are most deserving of attention, and which will at the same time illustrate the methods of analysis strictly applicable to all commercial speculations.

Mean Rate of Interest.

The wealth of a nation consists of its population, and of their possessions, animate or inanimate; and, as might be expected, a close analogy exists between the rate of increase of population by birth and the rate of interest of capital.

The registered rate of birth in England has for 23 years (1838–1860) been 3·311 per cent., and the registered rate of death 2·231.

The birth-rate in the ten years 1851-60 was $\cdot 03417$, and the death-rate $\cdot 02224$. If we put for an instant $i = \cdot 03417$; and $f = \cdot 02224$; the $p = \cdot 01193$, or the rate of increase of population, will correspond with the rate of profit which we have hitherto been investigating.

Unfortunately, no adequate means of registering the rates of interest, or the losses on the investments of all the capital of the country, exist; and although insurance offices do determine the rate of profit on their capital, the operation is delicate, and requires science and judgment in application. It is a common error, for instance, to assume that the ruling rate of interest is the rate of profit on the funds of the society, to be taken as the basis of their tables, thus leaving out of account the unproductive balances, the reduced profits on certain investments, the losses of either capital or interest, and the establishment expenses involved in the investment and custody of capital.

The natural rate of interest is apparently between 3 and 4 per cent., the latter rate being only attainable on the whole of the funds by skilful investment. The average rate probably differs little from the birth-rate.

A net interest of 3 per cent. per annum allows for all the contingencies to be practically taken into account; and the excess of interest over this rate is fairly considered mercantile income to be dealt with, after due reserves are made and expenses are met, as divisible profit.

Some means should be taken to determine the rates of interest upon different classes of investments—and the rates of loss—to place the finance and the higher commerce of the country on a sound and scientific basis.*

Determination of Initial and Terminal Values subject to Life Contingencies.

Any value (v) which at interest becomes £ 1 in a year, is by definition its present or initial value,—in this sense, that at the given rate of interest it will, with the interest, amount to £ 1 in one year. But if the £ 1 is only to be paid in the event of the life X surviving a year, v is no longer the present value of £ 1 then payable, for that value is reduced in proportion to the risk of loss. Now this risk varies at different ages; and at birth it is by the English Life Table (Persons) $\frac{149493}{1000000} = \cdot 149493 = \mu_0 =$ the fraction expressing the probability that a child will die in a year: and by the Life Table $\frac{850507}{1000000} = \frac{l_1}{l_0} = \cdot 850507 = p_0 =$ the fractional expression of the probability that the child will live a year. Thus $p_0 v^1 = \cdot 850507 \times \cdot 970874 = \cdot 825735$ is the value of £ 1 payable a year hence if a child just born be then alive. The value of £ 1 then payable if the child has died in the year is $\mu_0\, v^1 = \cdot 149493 \times \cdot 970874 = \cdot 145139$. And the sum of these values is $\cdot 825735 + \cdot 145139 = \cdot 970874 = \frac{1}{1\cdot 03}$, the sum which at 3 per cent. interest will amount to £ 1 at the end of a year.

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* See Report of Proceedings of Statistical Congress in London (Vol. I. pp. 201–2); and also some excellent papers by Mr. W. B. Hodge on the Rate of Interest in the Journal of the Institute of Actuaries (Vols. vi, vii, viii, ix.)

It is important to observe that there is a direct connection between the value of £ 1 payable if the life die, and the value of the sum payable if the life survive; for the one value can be derived from the other through the intermediary of v, or the function involving the rate of interest. Thus at the age of 20 the value of £ 1 to be paid at the end of the year in the event of the death of X is ·008044; and the value of £ 1 to be paid if he survive is $\cdot 970874 - \cdot 008044 = \cdot 962830$; the £ ·008044 paid as a premium being equivalent to the value of the chance of £ 1; but it is evident that in dealing with an individual case, if the life die the insurer will be called upon to pay £ 1 or 240 pence, while, if the life survive, the insurant will have sacrificed 2 pence, and the profit of the insurer will be 2 pence = ·008.

Thus the insurant for £1000 policy incurs little risk of loss, or £ 8·044; but the insurer incurs the risk of having to pay £ 1000 for which he has only the premium. The fluctuation in the risk diminishes as the number of lives on which the insurances are effected; until, as the numbers increase, it becomes nearly constant, and can be covered by an addition to the premium, if the Life Table correctly represents the average probabilities of life and death in the population among whom the insurances are effected.

These examples show in what sense £ 8·044 is the present value of £ 1000 payable in the event of the death of X during the year; it is the present value of the specific chance of receiving £ 1000. The value of any sum depending on the chance of X living to or dying before any future age $x + n$, is determined by the same method.

It has been stated, in describing the Tables, that the series $v^x l_x + v^{x+1} l_{x+1} + v^{x+2} l_{x+2} \ldots\ldots$ is represented by $D_x + D_{x+1} + D_{x+2} \ldots\ldots$; and that $N_x = D_x + D_{x+2} + D_{x+3} \ldots\ldots + D_\omega =$ the present value of £ 1 payable annually to each of the $l_x, l_{x+1}, l_{x+2} + \ldots\ldots l_\omega$ persons living at the successive ages after x. But $\frac{D_{x+1}}{D_x} = \frac{v l_{x+1}}{l_x}$; and $\frac{D_{x+2}}{D_x} = \frac{v^2 l_{x+2}}{l_x}$; and universally $\frac{v^n l_{x+n}}{l_x}$: so by making n successively 1, 2, 3, . . . until $x + n = \omega$, the last age of the Life Table, a series of fractions is obtained; of which the sum is $\frac{N_x}{D_x} = A_x =$ the initial value of an annuity of £ 1 payable at the beginning of every year that X shall live.

If the probability that Y will live n years is $\frac{l_{y+n}}{l_y}$; and the probability that X will live n years is $\frac{l_{x+n}}{l_x}$; the probability that both will live n years is

$\frac{l_{y+n}}{l_y} \cdot \frac{l_{x+n}}{l_x}$; and the value of £1 dependent upon that compound event is $\frac{v^n\, l_{y+n} \cdot l_{x+n}}{l_y \cdot l_x}$. The same reasoning may be extended to any number of lives.

The series $l_x\, l_y,\ v\, l_{x+1}\ l_{y+1},\ v^2\, l_{x+2}\ l_{y+2}, \ldots v^n\, l_{x+n}\, l_{y+n}$ being converted into $v^{\frac{x+y}{2}+n}\, l_{x+n} \cdot l_{y+n}$, is adapted for use by this skilful change, and is simply expressed by $D_{x,y} + D_{(x,y)+1} + D_{(x,y)+2} + D_{(x,y)+3} \ldots\ldots D_{x+n,\omega}$, or $D_{\omega, y+n}, = N_{x,y}$, and $\frac{N_{x,y}}{D_{x,y}} = A_{x,y}$ = the value of £1 a year payable at age x and at the beginning of every year of joint after-lifetime. It ceases at the death of the first life, whether it be that of X or Y. The $A_{x,y}$ is the sum of the compound fractions expressing the values of all the annual chances of getting £1.

$\frac{N_{xyz}}{D_{xyz}} = A_{xyz}$, and the same notation may be extended to any number of lives. The series D_{vwxyz} ends whenever any of its factors become $l_\omega = 0$.

By the Life Table it is shown that of l_x persons of the age x, the deaths will most probably be $d_x, d_{x+1}, d_{x+2}, \ldots\ldots d_\omega$ in each year of life; the probability that X will die in the year after age x is $\frac{d_x}{l_x} = \mu_x$, and, taking interest into account, the value of £1 payable in that event at the end of that year is $\frac{v^1\, d_x}{l_x} = \frac{v^{x+1} d_x}{v^x\, l_x} = \frac{C_x}{D_x}$. In like manner, the value of the £1 payable if X die, not in the first year, but in the year after age $x + 1$, is $\frac{v^{x+2}\, d_{x+1}}{v^x\, l_x} = \frac{C_{x+1}}{D_x}$; and so, in like manner, all the initial values of the terminal £1 being found, their sum is $\frac{M_x}{D_x} = \frac{C_x + C_{x+1} \ldots + C_\omega}{D_x} = \Pi_x$; such is the initial value of £1 payable at the death of X,—that is, at the end of the year in which he dies, happen whenever it might. This premium insures £1, the payment of which is dependent on a single event; but as the value varies with the times of payment, the lifetime is divided into equal sections, and the chances of the death happening in the first, second, third, and every subsequent year, with the element of interest, determine the values precisely as if for the *survivor* at the end of every year a new life were substituted of the same age and health as X.

The probability that X will die before attaining the n^{th} year is $\frac{d_x + d_{x+1} \ldots\ldots d_{x+n-1}}{l_x} = \frac{l_x - l_{x+n}}{l_x}$; which may be written $\frac{l_{x|n}}{l_x} = \mu_{x.n} = 1 - \frac{l_{x+n}}{l_x}$.

The probability that X will die in the year after the age $x + n$ is $\frac{d_{x+n}}{l_x} = \mu_{x+n}$; that X will die after living to the age of $x + n$ years is $\frac{l_{x+n}}{l_x}$; which is also the probability that X will *not die* in the next n years; or it is the probability that X will live n years. The initial value of £1 payable if X is alive at the end of n years is thus, as before, found to be $\frac{v^n l_{x+n}}{l_x} = v^n p_{x.n}$.

When $n = 1$ the probability of living a year is $\frac{l_{x+1}}{l_x} = p_x$, which is conventionally its symbol; therefore the probability that X will die in the year is $1 - p_x = \mu_x$; for $p_x + \mu_x = 1$, the symbol of certainty, as it is certain that X will be either alive or dead at the end of the term: vp_x is the value of £1 payable if X be alive; and $v\,(1 - p_x) = v\mu_x = v - vp_x$ is the value of £1 payable if he die in the year.

As $v^{x+1} \frac{(l_x - l_{x+1})}{v^x\, l_x} = \frac{v^{x+1}\, d_x}{v^x\, l_x} = \frac{C_x}{D_x}$, it is evident that for the series $M_x = C_x + C_{x+1} \ldots + C_\omega$, the two following series may be substituted,—

$$\begin{aligned} & v\,(v^x l_x + v^{x+1}\, l_{x+1} \ldots\ldots + v^\omega l_\omega \\ & - (v^{x+1}\, l_{x+1} + v^{x+2}\, l_{x+2} \ldots\ldots + v^\omega l_\omega \\ & = v^{x+1}\, l_x - (1 - v)\,(v^{x+1}\, l_{x+1} + v^{x+2}\, l_{x+2} \ldots\ldots + v^\omega l_\omega). \end{aligned}$$

Putting $D_x = v^x l_x$; and $D_{x+n} = v^{x+n}\, l_{x+n}$ for every value of x and n, the last equation becomes,—

$$\begin{aligned} & v\, D_x - (1 - v)\,(D_{x+1} + D_{x+2} + \ldots + D_\omega) \\ & = v\, D_x + (1 - v)\, D_x - (1 - v)\, \{D_x + D_{x+1} + D_{x+2} \ldots D_\omega\} \\ & = D_x - (1 - v)\, N_x. \end{aligned}$$

And putting $1 - v = d = \frac{i}{1 + i}$, we have,

$\frac{M_x}{D_x} = \frac{D_x - dN_x}{D_x}$ = the present value of £1 payable at the end of the year that X may die, expressed in the terms which express the values of sums depending on the continuance of life,—

$$= 1 - d\,\frac{N_x}{D_x} = 1 - dA_x = 1 - \frac{i}{1 + i}\, A_x.$$

Let $C_{xy} = v^{\frac{x+y}{2}+1}\,(l_x\, l_y - l_{x+1}\, l_{y+1})$, then, for the same reasons as hold in the case of the single life,—

$$\begin{aligned} M_{xy} &= C_{xy} + C_{(xy)+1} + C_{(xy)+2} \ldots\ldots + C_{x\omega} \text{ or } C_{y\omega} \\ &= D_{xy} - dN_{xy} \end{aligned}$$

$$\text{And } \frac{M_{xy}}{D_{xy}} = 1 - d\,\frac{N_{xy}}{D_{xy}} = 1 - dA_{xy}.$$

This is the value at ages x and y of £1 payable at the end of the year of the death of the first of two lives X and Y.

The same reasoning applies to three, four, five, or any number of associated lives, which, like the atoms in an organic molecule, form a definite combination destructible by the detachment of the first life from the compound.

The general expression for the values of £1, payable upon this contingency, is

$$\Pi_{xyz,\,\&c.} = \frac{M_{xyz,\,\&c.}}{D_{xyz,\,\&c.}} = 1 - d\,\frac{N_{xyz,\,\&c.}}{D_{xyz,\,\&c.}} = 1 - dA_{xyz,\,\&c.} = 1 - viA_{xyz,\,\&c.}$$

$$\text{As } M_{xyz} = D_{xyz} - dN_{xyz}\,;$$

$$\text{So } N_{xyz} = \frac{D_{xyz} - M_{xyz}}{d} = (D_{xyz} - M_{xyz})\,\frac{1+i}{i}$$

$$\text{And } A_{xyz} = \frac{N_{xyz}}{D_{xyz}} = \left(1 - \frac{M_{xyz}}{D_{xyz}}\right)\frac{1}{d}$$

$$= (1 - \Pi_{xyz})\,\frac{1+i}{i} = \frac{1}{a_{xyz}} = \frac{1}{\pi_{xyz} + d}$$

Thus if the values of π_{xy} or Π_{xyz} have been calculated, the values of A_{xy} or A_{xyz} are immediately derived from them; and each of the two series $M_{xy,\,\&c.}$ and $N_{xy,\,\&c.}$ has its peculiar advantages; but of the two, the latter is the most common, and the most useful.

[*Note.*—$\Pi_{xyz,\,\&c.} + viA_{xyz,\,\&c.} = 1 = \Pi_{xyz,\,\&c.}$ *and* the value of the interest of £1 paid yearly in advance during the joint lives. Also $\pi_{xyz} + vi = a_{xyz}$.]

The joint life of X and Y terminates (1) in the first year by the death of X, while Y survives, of which $\frac{l_{y+1}\,d_x}{l_y\,l_x}$ is the probability; (2) by the death of Y, while X survives, the probability of which is measured by $\frac{l_{x+1}}{l_x} \cdot \frac{d_y}{l_y}$; and (3) by the death in the year of X and Y, of which the fraction $\frac{d_x\,d_y}{l_x\,l_y}$ expresses the probability.

Thus, as $v\,\frac{l_{x+1} \cdot l_{y+1}}{l_x \cdot l_y}$ is the value of £1 to be paid if X and Y jointly survive at the age $x+1$ and $y+1$; so $v\,\frac{l_{y+1}}{l_y} \cdot \frac{d_x}{l_x} =$ the value of £1 payable if Y only survive, and X die in the year; $v\,\frac{l_{x+1}}{l_x} \cdot \frac{d_y}{l_y} =$ the value of £1 payable if X survive, and Y die; no payment being made if X and Y die, of which the chance is $\frac{d_x \cdot d_y}{l_x \cdot l_y}$.

All the cases are indicated in the following development,—

$$l_x \cdot l_y = (l_{x+1} + d_x)(l_{y+1} + d_y) = l_{x+1} \cdot l_{y+1} + l_{x+1}\,d_y + l_{y+1} \cdot d_x + d_x \cdot d_y$$

$$1 = \frac{l_{x+1} \cdot l_{y+1}}{l_x \cdot l_y} + \frac{l_{x+1} \cdot d_y}{l_x \cdot l_y} + \frac{l_{y+1} \cdot d_x}{l_x \cdot l_y} + \frac{d_x \cdot d_y}{l_x \cdot l_y}$$

The value of £1 payable if X is alive at the end of one year is $\frac{l_{x+1}}{l_x}$; and the value of the chance of obtaining it is further reduced by the condition that Y shall die before the first payment is due; of which the probability is,—

$$\frac{d_y}{l_y} = \frac{l_y - l_{y+1}}{l_y} = 1 - \frac{l_{y+1}}{l_y} = 1 - p_y.$$

The value of the £1 subject to the two conditions is,—

$$v\,\frac{l_{x+1}}{l_x}\left(1 - \frac{l_{y+1}}{l_y}\right) = v\,\frac{l_{x+1}}{l_x} - v\,\frac{l_{x+1}\;l_{y+1}}{l_x\;l_y} = v\,(p_x - p_x\,p_y);$$

which may be written $v\,(p_x - p_{xy})$.

The value of the second payment of £1 is dependent on X surviving and Y dying in two years; so it is,—

$$\begin{aligned} & v^2\,\frac{l_{x+2}}{l_x}\left(\frac{l_y - l_{y+2}}{l_y}\right) \\ &= v^2\,\frac{l_{x+2}}{l_x} - \frac{v^2\,l_{x+2}\,.\,l_{y+2}}{l_x\,.\,l_y} \\ &= v^2\,p_{x\,.\,2} - v^2\,p_{x\,.\,2}\,.\,p_{y\,.\,2} \end{aligned}$$

The value of the n^{th} payment is,—

$$v^n\,\frac{l_{x+n}}{l_x} - v^n\,\frac{l_{x+n}\,.\,l_{y+n}}{l_x\,.\,l_y} = v^n\,p_{x\,.\,n} - v^n\,p_{xy\,.\,n}$$

If n be made successively 0, 1, 2, 3, ... until either $x + n$ or $y + n = \omega$, the sum of all the values will be $A_x - A_{xy} = A_{x\,|\,y}$ = the value of an annuity of £1, first payment at the end of the year in which Y shall die, and last payment at the beginning of the last year of the life of X.

Assume that B buys this survivorship annuity on X, a similar annuity of £1 on Y, and an annuity of £1 on the joint lives—that is, payable annually so long as both live—then the value of his purchase will be,—

$$\begin{array}{lr} (1) & A_x - A_{xy} \\ (2) & A_y - A_{xy} \\ (3) & + A_{xy} \\ \hline \end{array}$$
$$A_{\overline{xy}} = A_x + A_y - A_{xy}$$

The annuity of £1 is first payable in this case at the date of the purchase, and is due annually until the year when the life of the longest liver, either X or Y, expires.

This formula can be obtained independently. The probability that both X and Y will die before the end of n years is,—

$$\left(\frac{d_x + d_{x+1} \ldots d_{x+n-1}}{l_x}\right) \left(\frac{d_y + d_{y+1} \ldots d_{y+n-1}}{l_y}\right)$$

$$= \frac{l_x - l_{x+n}}{l_x} \cdot \frac{l_y - l_{y+n}}{l_y}$$

$$= \left(1 - \frac{l_{x+n}}{l_x}\right) \left(1 - \frac{l_{y+n}}{l_y}\right) = (1 - p_{x.n})\,(1 - p_{y.n})$$

$$= 1 - \frac{l_{x+n}}{l_x} - \frac{l_{y+n}}{l_y} + \frac{l_{x+n} \cdot l_{y+n}}{l_x \cdot l_y}$$

$$= 1 - p_{x \cdot n} - p_{y \cdot n} + p_{xy \cdot n}$$

Subtracting the two last equations from unity, the probability that either X or Y, or X and Y, will survive, is found to be,—

$$p_{\overline{xy} \cdot n} = \frac{l_{x+n}}{l_x} + \frac{l_{y+n}}{l_y} - \frac{l_{x+n} \cdot l_{y+n}}{l_x \cdot l_y}$$

$$= p_{x \cdot n} + p_{y \cdot n} - p_{xy \cdot n}$$

Upon inserting v^n in each term, and making n vary from 0 to 1, 2, 3, ... until $x + n$, or $y + n = \omega$, all the values of the successive payments are found, of which the sum is $A_{\overline{xy}} = A_x + A_y - A_{xy}$.

This is often called the value of *an annuity on the longest of two lives.*

To interpret the following equation, assume that what is more probable than any other combinations will happen,—

$$l_x \cdot l_y = l_{x+1} \cdot l_{y+1} + l_{x+1} \cdot d_y + l_{y+1} \cdot d_x + d_x\, d_y$$

and let the number $l_x \cdot l_y$ represent married couples; so there will be $l_x \cdot l_y$ husbands, and $l_x \cdot l_y$ wives. Then, at the assumed rate $\left(\frac{d_x}{l_x}\right)$ of mortality, out of $l_x \cdot l_y$ husbands $\frac{d_x}{l_x} \cdot l_x \cdot l_y = d_x\, l_y = d_x\,(l_{y+1} + d_y)$ will die, leaving $d_x\, l_{y+1}$ widows alive; and, by hypothesis, $\frac{d_y}{l_y} \cdot l_x \cdot l_y = d_y \cdot l_x = d_y\,(l_{x+1} + d_x)$ wives will die, leaving $d_y \cdot l_{x+1}$ widowers. The $d_x\, d_y$ husbands and the $d_y\, d_x$ wives who die in the year dissolve between them only $d_x\, d_y$ couples.

Now, following the $d_x\, l_{y+1}$ widows—if they experience the common rate of female mortality at their age—they will fall year by year to $d_x\, l_{y+2}$ to $d_x\, l_{y+3}$ . . . . $+ \, d_x\, l_\omega$.

The widows out of $l_{x+1} \cdot l_{y+1}$ wives will in the second year be $d_{x+1} \cdot l_{y+2}$; which will fall year by year to $d_{x+1} \cdot l_{y+3}$ to $d_{x+1}\, l_{y+4}$ . . . to $d_{x+1} \cdot l_\omega$: and so the widows of every year will form a separate decreasing series of annuitants; the value of whose annuities is represented in the annexed scheme.

Initial Value of Life Annuities of £1 to each Widow surviving out of $l_x l_y$ Wives.

$$\begin{aligned}
&v^1 (d_x l_{y+1}) && = v^1 l_{y+1} (l_x - l_{x+1}) \\
&v^2 (d_x l_{y+2} + d_{x+1} l_{y+2}) = v^2 l_{y+2} (d_x + d_{x+1}) && = v^2 l_{y+2} (l_x - l_{x+2}) \\
&v^3 (d_x l_{y+3} + d_{x+1} l_{y+3} + d_{x+2} l_{y+3}) && = v^3 l_{y+3} (l_x - l_{x+3}) \\
&v^4 (d_x l_{y+4} + d_{x+1} l_{y+4} + d_{x+2} l_{y+4} + d_{x+3} l_{y+4}) && = v^4 l_{y+4} (l_x - l_{x+4}) \\
&v^n (d_x l_{y+n} + d_{x+1} l_{y+n} \ldots d_{x+n-1} l_{y+n}) && = v^n . l_{y+n} . (l_x - l_{x+n}) \\
& && = (d_x + d_{x+1} + \ldots d_{x+n-1}) v^n l_{y+n}.
\end{aligned}$$

The series terminates when $y + n = \omega =$ the last age in the Table; and upon summing up the series from $n = 1$ to $n = \omega - y$, multiplying by v^y, and dividing by $v^y l_y l_x = D_y l_x$, the value of the survivorship annuity upon Y after the death of X is determined. It is in this case the value of an annuity of £1 to the surviving widow (Y) of X.

$$(1) \quad A_{y \mid x} = \frac{d_x N_{y+1} + d_{x+1} N_{y+2} + d_{x+2} N_{x+3} \ldots .}{v^y l_x l_y = l_x D_y}$$

$= \dfrac{N_y}{D_y} - \dfrac{N_{xy}}{D_{xy}} = A_y - A_{xy} =$ the value of an annuity of £1 on the life of Y after the death of X, as before shown.

This identity is evident; the separate terms being summed up in different orders.

Should the annuity to the widow at age y not be of the tabular value A_{y+1}, but any other value—such, for example, as $A'_{y+1} =$ the annuity to a widow to cease during coverture—then $D_{y+1} A'_{y+1}$ must be substituted for N_{y+1}, and the equation becomes,—

$$(2) \qquad A'_{y \mid x} = \frac{d_x D_{y+1} A'_{y+1} + d_{x+1} D_{y+2} A'_{y+2} \ldots .}{v^y l_y l_x = D_y l_x}$$

$=$ the initial value of an annuity so limited.

When the value $A'_{y+1} = \dfrac{N_{y+1}}{D_{y+1}}$, the D_{y+1} disappears from the first term; and, in like manner, when $A'_{y+2} = \dfrac{N_{y+2}}{D_{y+2}}$, the D_{y+2} disappears from the second term, and so on to the end; hence the absence of D_{y+n} in the previous equation.

When $N'_{y+1} = v^{y+1} l'_{y+1} + v^{y+2} l'_{y+2} \ldots .$ differs from N_{y+1} it may be substituted for it in Equation 1. by simply multiplying it into $\dfrac{D_{y+1}}{D'_{y+1}}$.

Thus, for N_{y+1} we have $\dfrac{D_{y+1}}{D'_{y+1}} N'_{y+1} = \dfrac{l_{y+1}}{l'_{y+1}} N'_{y+1} = D_{y+1} \cdot \dfrac{N'_{y+1}}{D'_{y+1}} = D_{y+1} \cdot A'_{y+1}$. This has the effect of making l_{y+1} the basis of the new series; which is indispensable, inasmuch as $d_x\, l_{y+1}$ widows by hypothesis claim the annuity at the age $y + 1$; and as the value of the annuity is A'_{y+1} by hypothesis, the value of $d_x\, l_{y+1}$ such annuities is $d_x\, l_{y+1}\, A'_{y+1}$. The same reasoning applies to all the other terms.

When three lives X, Y, and Z are concerned, the probabilities of living and of dying are determined in the same way as in the simpler case of two lives; and the equations admit of similar interpretations.

Thus let,—

$$\begin{aligned} l_x \,.\, l_y \,.\, l_z &= (l_{x+1} + d_x)(l_{y+1} + d_y)(l_{z+1} + d_z) \\ &= l_{x+1}\, l_{y+1}\, l_{z+1} + d_x\, l_{y+1}\, l_{z+1} + d_x\, d_y\, l_{z+1} + d_x\, d_y\, d_z \\ &\qquad\qquad\qquad\;\; d_y\, l_{x+1}\, l_{z+1} + d_x\, d_z\, l_{y+1} \\ &\qquad\qquad\qquad\;\; d_z\, l_{x+1}\, l_{y+1} + d_y\, d_z\, l_{x+1} \end{aligned}$$

Then there are, by hypothesis, $l_x \,.\, l_y \,.\, l_z$ triple units, into which that number of lives of the class X, that number of Y's, and that number of Z's, enter; of which $l_{x+1} \cdot l_{y+1} \cdot l_{z+1}$ combinations subsist at the end of the year; $l_x\, l_y\, l_z - l_{x+1}\, l_{y+1}\, l_{z+1}$ combinations having been broken up by the deaths of either X, or Y or Z; or by the deaths of X and Y, X and Z, and Y and Z; or by the deaths of X and Y and Z.

Let p_x, p_y, and p_z be the several probabilities that X, Y, and Z will live; and $(1 - p_x)$, $(1 - p_y)$, and $(1 - p_z)$ be the several probabilities that they will die in the year; then p_x, p_y, p_z, which may be written p_{xyz}, = the probability that X, Y, Z will live a year, and vp_{xyz} £1 = the initial value of £1 to be paid if the three be alive at the end of the year; but $(1 - p_x)\, p_{yz} = p_{yz} - p_{xyz} =$ the probability that X will die, and Y, Z will be alive, so the initial value of £1 dependent upon the happening of that combination of events is $v\,(p_{yz} - p_{xyz}) = vp_{yz} - vp_{xyz}$; again, the probability that X and Y will die in the year, and Z be alive, is $(1 - p_x)\,(1 - p_y)\, p_z$; and $(1 - p_x)\,(1 - p_y)\,(1 - p_z) =$ the probability that X, Y, and Z will die in the year.

Multiplying out the last three factors, and subtracting the product from unity, $p_{\overline{xyz}} = p_x + p_y + p_z - p_{xy} - p_{xz} - p_{yz} + p_{xyz}$ is found to be the expression of the probability that all will not be dead; that is, that the three, or some two, or some one of the three lives will survive. The value of £1 dependent on this survivorship is immediately determined by the expression $v^n p_{\overline{xyz} \cdot n}$. Now the sum of the values of annuities dependent upon any life contingency of the kind is determined by the equation $A_{\overline{xyz,\,\&c.}} = \int v^n p_{\overline{xyz,\,\&c.} \cdot n}$ on making n successively 0, 1, 2, 3, ... ; and finding the sum. This in the case of three lives is,—

$$A_{\overline{xyz}} = A_x + A_y + A_z - A_{xy} - A_{xz} - A_{yz} + A_{xyz}.$$

All the values of the annuities on the single life are given; those on two lives are immediately found from the Tables; and the annuity on the third life is readily calculated, by adding the $\lambda\, l_z$ to $\lambda\, D_{xy}$; $\lambda\, l_{z+1} + \lambda\, D_{(xy)+1}$; and so on till the series terminates. From the successive values of D_{xyz} the N_{xyz} and the annuity are found in the usual way.

Besides the two cases of which p_{xyz} and $p_{\overline{xyz}}$ are the symbols, there are others; thus, as the value of £1 payable if X and Y and Z are alive at the end of n years is $v^n\, p_{xyz\,.\,n}$, so $v^n\, p_{yz\,.\,n}\, (1 - p_{x\,.\,n}) = v^n\, (p_{yz\,.\,n} - p_{xyz\,.\,n})$; which, upon taking the sums of all the values from $n = 0$, until the series terminate by a factor becoming zero, is found to be $A_{yz} - A_{xyz} = A_{yz\,|\,x.}$ Such is the value of an annuity of £1 on the joint lives of Y and Z; the first payment to be made only after the death of X, and no payment to be made after the death of either Y or Z.

It will be borne in mind that $p_{x\,.\,n} = \frac{l_{x+n}}{l_x}$; and that when $n = 0$ this becomes $p_{x\,.\,0} = \frac{l_x}{l_x} = 1$; that when $n = 1$, the value $p_{x\,.\,1} \left(= \frac{l_{x+1}}{l_x} \right)$ is always written p_x; and that as the form of the equations is unaffected by the value of n, when this form is determined for the case $n = 1$, it is determined for all ordinary cases.

The Appendix to the Registrar General's Twelfth Annual Report contains investigations of the fundamental equations for determining in respect to single lives the value of policies on which any premium (π) and any sum at death (s) is paid. See, for instance, Case IV., p. 18 of that Appendix; in which it is only necessary to substitute the series $l_x \cdot l_y \cdot l_z$ for l_x, and $l_x \cdot l_y \cdot l_z - l_{x+1} \cdot l_{y+1} \cdot l_{z+1}$ for d_x to deduce the same values for three lives. The method is applicable to any number of lives, and is therefore general. The l_x will represent any connected series whatever, and $l_x - l_{x+1} = d_x$ will represent the difference of any two terms of such series.

PART IV.—SYNOPSIS OF SYMBOLS, FORMULAS, AND PRACTICAL RULES FOR THE USE OF THE TABLES.

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1. GENERAL CONTINGENT VALUES.

Initial and Terminal Values as affected by use.

Discount.

$i =$ the rate of discount, or the proportion of £ 1 deducted as discount for the use of the £ 1 during one year. When the rate of discount is 5 per cent. per annum $i = \cdot 05$.

$(1 - i) =$ the initial value under this system, and £ 1 = the terminal value.

$s = a\,(1 - i) =$ sum for which £ a can be discounted at the rate i.

$a = \frac{s}{1-i} =$ amount of securities which s will discount.

$ai =$ the discount of £ a.

$$i = \frac{a-s}{a} = 1 - \frac{s}{a}.$$

$1 + p = \frac{1}{1-i} =$ the amount realized by £ 1 employed in discounting.

$p = \frac{1}{1-i} - 1 = \frac{i}{1-i} =$ the annual rate of profit by discounting for a year in one operation at the rate i.

[*Note.*—When the rate of discount is 5 per cent. per annum, the rate of profit is 5·263 per cent., or ·05263.]

$$p = i + i^2 + i^3 \ldots . \; i^{\infty}.$$

$s = a\left(1 - \frac{i}{x}\right) = a - \frac{ai}{x} =$ sum of money for which £ a in securities is discounted for the x^{th} part of a year, at the rate i.

$a = \dfrac{s}{1 - \dfrac{i}{x}}$ = securities discounted with £ s for the x^{th} part of a year; and $\dfrac{ai}{x}$ = the discount.

If $s = 1000$, $i = \cdot 04$; and $x = 4$; the $a = \dfrac{1000}{\cdot 99}$ = discounted securities = £1010 · 1010; and the discount is £ 10 · 1010.

$x = \dfrac{ai}{a - s}$ = number of transactions in the year; and the mean term = x^{th} of year.

$$1 + p = \left(1 - \frac{i}{x}\right)^{-x} = 1 + \frac{x}{x}\,\frac{i}{1} + \frac{x\cdot(x+1)}{x^2}\cdot\frac{i^2}{1\cdot 2} + \frac{x\,(x+1)\,(x+2)}{x^3}\,\frac{i^3}{1\cdot 2\cdot 3}$$

. . . .

i is usually a small fraction; when $x = 1$ the function is at its maximum, as above; and when $x = \infty$,

$$1 + p = e^i = 1 + \frac{i}{1} + \frac{i^2}{1\cdot 2} + \frac{i^3}{1\cdot 2\cdot 3} \ldots\ldots \text{ And } \lambda\,(1 + p) = ik = i \times \cdot 43429448.$$

Interest.

i = the rate of interest = the price to be paid at the end of the year for the use of a unit of value, such as £ 1, of which the interest is $i \times$ £ 1. When $i = \cdot 05$ interest is said to be at the rate of 5 per cent.

1 = the principal which yields the interest i.

$r = 1 + i$ = the terminal value of £ 1 at interest.

$$1 = \frac{1 + i}{1 + i} = \frac{1}{1 + i} + \frac{i}{1 + i} = 1 - i + i^2 - i^3 \ldots\ldots + (i - i^2 + i^3 \ldots\ldots$$

$v = \dfrac{1}{1 + i}$ = the present or initial value of £ 1 due at the end of a year [so far as the value depends on the rate of interest, is understood in this and the like cases].

$d = \dfrac{i}{1 + i} = vi$ = the present value of the interest (i) of £ 1; the rate of Rebate. It is sometimes called the rate of Discount; but has no just claim to a term which is employed in a different sense.

[*Note.*—$r = \dfrac{1}{v} = v^{-1}$; $v = \dfrac{1}{r} = r^{-1}$; $v + d = 1$; $d = 1 - v$; $v = 1 - d$.]

When r is invested at the end of the year again at the same rate, r^2 is the amount of £1 in two years; and the £1 is said to be invested at *compound interest.*

$r^n = v^{-n} = (1 + i)^n =$ the terminal value of £1 at interest n years; or the amount of £1 at compound interest for n years.

$v^n = \frac{1}{r^n} = r^{-n} = \frac{1}{(1 + i)^n} =$ the initial value of £1 payable at the end of n years.

$\frac{i}{x} =$ the interest on £1 during the x^{th} part of a year.

$p =$ the annual rate of profit, or the profit on the investment of £1 in any way at interest during a year.

$$1 + p = \left(1 + \frac{i}{x}\right)^x = 1 + \frac{xi}{x} + \frac{x\,(x-1)}{1 \cdot 2}\,\frac{i^2}{x^2} + \frac{x\,(x-1)\,(x-2)}{1 \cdot 2 \cdot 3}\,\frac{i^3}{x^3} \cdot \cdot \cdot \cdot \cdot$$

The rate of profit is thus found when there are x investments of accruing interest in the year. Interest is in this case said to be *convertible* into *principal* x times in the year.

$$1 + p = \left(1 + \frac{i}{1}\right)^1 = 1 + i$$

$$1 + p = \left(1 + \frac{i}{x}\right)^x = \left(1 + \frac{i}{\infty}\right)^\infty = e^i$$

$$\lambda\,(1 + p) = ik = i \times \cdot 43429448.$$

The rate of profit is thus found when the interest is invested at momently intervals, and the profit is theoretically at its maximum; that is, if the element of labour of investing be left out of consideration.

$s = a\,(1 + p)^n =$ the amount of £a under investment at a constant annual profit (rate p) during n years.

When i is so taken as to represent the pure rate of profit; also

$$s = a\,(1 + i)^n = ar^n = \frac{a}{v^n}. \quad \text{And } \lambda s = \lambda a - \lambda v^n.$$

$a = \frac{s}{(1 + i)^n} = sv^n =$ the sum which will amount to £s in n years.

$$\lambda a = \lambda s + \lambda v^n$$

$$i = \left(\frac{s}{a}\right)^{\frac{1}{n}} - 1$$

$$v^n = \frac{a}{s} \;\therefore\; n\lambda v = \lambda a - \lambda s; \text{ and}$$

$n = \frac{\lambda a - \lambda s}{\lambda v} = \frac{\lambda s - \lambda a}{\lambda r} =$ number of years in which £a at interest amounts to £s.

Time (n) in which £ a at interest becomes £ $2\,a$.

$$n = \frac{1}{i} = \text{time of doubling at simple interest.}$$

$$n = \frac{\lambda\, 2}{\lambda\,(1+i)} = \text{time of doubling at compound interest.}$$

For the ordinary rates of interest this is nearly $\frac{1}{i} \times \cdot 7$.

TERMINAL VALUE OF ANNUITIES CERTAIN; OR AMOUNT OF ANNUITIES FORBORNE.

$$R_x = 1 + r + r^2 + r^3 \;.\;.\; r^{x-1}.$$

The amount of x payments of annuity of £ 1, laid up at compound interest, the first payment having been invested $x - 1$ years, the last having been just paid :

$$= \frac{r^x - 1}{i}$$

If £ a = annuity,

$$s = a\,\frac{r^x - 1}{i}$$

$$a = \frac{is}{r^x - 1}$$

$$x = \frac{\lambda\,(a + is) - \lambda a}{\lambda r}$$

INITIAL OR PRESENT VALUE OF ANNUITIES.

$$V_x = 1 + v + v^2 + v^3 \;.\;.\;.\; + v^x = \frac{1+i}{i}\,(1 - v^{x+1})$$

= value of $x + 1$ payments of £ 1, first payment now.

$$V_{x-1} = 1 + v + v^2 + v^3 \;.\;.\;.\; v^{x-1}$$

$$= \frac{(1+i)}{i}\,(1 - v^x) = V_\infty - v^x\, V_\infty$$

= the value of x payments of an annuity of £ 1, first payment now, the x^{th} or last at the end of the $(x-1)^{\text{th}}$ year; or, which is the same, at the beginning of the x^{th} year.

When $x = \infty$; this becomes $\frac{1+i}{i} = V_\infty$

$\boldsymbol{s = \frac{a}{i}\,(1+i)\,(1 - v^x)}$ = the present value of a similar annuity of £ a.

$$a = \frac{si}{(1+i)\,(1-v^x)}$$

When $x = \infty$,

$s = a \frac{(1 + i)}{i}$ = value of £ a annuity for ever, called the perpetuity of £ a, first payment now due.

$a = \frac{is}{1 + i}$ = perpetual annuity, of which £ s is the value, first payment due now.

When annuity (a) is to be first paid at the end of x years, its value is,—

$s = v^x \frac{(1 + i)}{i} a$ = the value of the reversionary annuity of £ a.

$a = \frac{is}{(1 + i) v^x}$ = reversionary annuity of which £ s is the initial value.

When the annuity is paid only at the end of the first and of each of x years, its value becomes,—

$a (v^1 + v^2 + v^3 \ldots\ldots + v^x) = s = a \frac{(1 - v^x)}{i}$; and if a = £ 1,

$s = \frac{1}{i} - \frac{v^x}{i}$ = the value of the annuity of £ 1 for x years.

$s = \frac{v^x}{i}$ = the value of the reversion of £ 1, first payment due at the end of the $(x + 1)$th year.

And when $x = \infty$,

$s = \frac{a}{i}$ = the value of the perpetuity of £ a, first payment due at end of a year.

$s = a \left(\frac{n + 1}{i}\right) \left\{1 - \frac{1}{\left(1 + \frac{i}{n}\right)^{nx}}\right\}$ = the value of £ a, first payment now due, payable n times in the year during x years.

$s = a \frac{n + i}{i} = a \left(\frac{n}{i} + 1\right)$ = the value of the £ a in perpetuity.

$s_n = \frac{1}{n} \left(\frac{n}{i} + 1\right) = \frac{1}{i} + \frac{1}{n}$ = the value of the perpetuity of £ $\frac{1}{n}$ payable n times in the year, first payment $\left(£ \frac{1}{n}\right)$ now due : when $n = \infty$ this becomes $\frac{1}{i}$.

$s = \frac{1}{n} \cdot \frac{n}{i} = \frac{1}{i}$ = the value of the perpetuity of £ 1 payable in n instalments, at the end of every nth part of the year.

ANNUITY PAYABLE CONTINUOUSLY, AND INTEREST CONVERTIBLE MOMENTLY.

Put k = modulus of common logarithm, and $r = 1 + p$.

$V'_x = \frac{-k}{\lambda v}(1 - v^x) = \frac{k}{\lambda r}(1 - v^x)$ = value of annuity of £1 payable *momently* for x years.

$s = a\,V'_\infty = \frac{ak}{\lambda r}$ = value of perpetuity of £ a payable momently.

$s = V'_{|x} = \frac{av^x k}{\lambda r}$ = value of deferred annuity of £ a payable momently.

Under this system, taking p at 5 per cent.; $p = {\cdot}05$, the perpetuity of £ 1 is worth 20·4959 years' purchase. When the rate of interest $= i = {\cdot}05$, the profit by investing £1 and converting interest momently is $p = {\cdot}05127$ per annum. But $ik = \lambda\,(1 + p) = \lambda\,r = \lambda\,(1{\cdot}05127)$; and by inserting this value in the equation

$$V'_\infty = \frac{k}{\lambda r} = \frac{k}{ik} = \frac{1}{i}$$

we have a value of the perpetuity precisely equal to the value of the perpetuity with annual payments at the end of every year.

DISCOUNT AT RISK.

f = discredit fraction expressing probability of failing to pay £ 1 at the end of a year.

c = credit fraction or probability of paying £ 1 at the end of year.

$1 = c + f;\ c = 1 - f;\ f = 1 - c.$

$1 + p = \frac{(1 - f)\,s}{(1 - i)\,s}$ = the rate of profit on discounting £ s at the rate i, and risk f.

$1 + p = \left(\frac{x - f}{x - i}\right)^x$ = rate of profit from x discount transactions at x equal intervals in the year; rate i, risk f.

$1 + p = \frac{e^i}{e^f}\quad \therefore \lambda\,(1 + p) = (i - f)\,k = (i - f) \times {\cdot}43429448$ = the logarithm of $1 + p$, when the transactions are momently.

$i = \frac{p + f}{1 + p} = \frac{p}{1 + p} + \frac{f}{1 + p}$ = the discount-rate to yield the profit-rate p, when the risk-rate is f.

AMOUNT OF SUMS AT INTEREST AND RISK; THE RATE OF PROFIT.

$s = (1 + i)\,(1 - f)\,a =$ the amount of £ a at interest-rate i, and risk-rate f.

$$a = \frac{s}{(1 + i)\,(1 - f)}$$

$1 + p = (1 - f)\,(1 + i) = \frac{s}{a}$. Here p is the rate of net profit.

$i = \frac{1 + p}{1 - f} - 1 = \frac{p + f}{1 - f} = \frac{p + f}{c} =$ rate of interest to return a rate of profit p, when the risk-rate f is known.

If $f = \frac{q}{1 + p + q}$, then $i = p + q$ and $c = 1 - f = \frac{1 + p}{1 + i} = \frac{1 + p}{1 + p + q}$.

$$f = \frac{i - p}{1 + i} = \frac{i - p}{1 + p + q}$$

$1 + p = \left(1 - \frac{f}{x}\right)^x \left(1 + \frac{i}{x}\right)^x = 1 +$ profit-rate when the interest is convertible x times in the year, and the risk of failure in each interval is $\frac{f}{x}$.

$1 + p = \frac{e^i}{e^f} = 1 +$ rate of profit when interest is convertible momently, and the number of transactions in the year is $= \infty$.

$\therefore \lambda\,(1 + p) = (i - f)\,k = (i - f) \times \cdot 43429448.$

$\therefore$ when $f = 0$, $\lambda\,(1 + p) = ik$, and $i = \frac{\lambda\,(1 + p)}{k}$.

PRESENT VALUE OF SUMS AT USE AND RISK.

Let $v_1 = \frac{1}{1 + p} =$ the present value of £ 1 at no risk; then $\frac{1 - f}{1 + p} = v_2$, the reduced value when the rate of risk is $f = \frac{q}{1 + p + q}$.

And if $\frac{1 + p}{1 - f} = \frac{1 + p}{c} = \frac{1}{c} + \frac{p}{c} = 1 + i = 1 + p + q$.

$v = \frac{1 - f}{1 + p} = \frac{1}{1 + p + q} = \frac{1}{1 + i} =$ the initial value of £ 1 at use and risk.

$f = \frac{i - p}{1 + i} =$ risk-rate, deduced from p and i.

$p = ci - f$

Put $v = \frac{1}{1 + i} = \frac{\left(1 - \frac{f}{x}\right)^x}{\left(1 + \frac{p}{x}\right)^x} =$ present value of £ 1; that is, the value which invested x times in the year at the rate of profit p, risk f, will amount to £ 1 in the year.

When $x = 1$ this expression becomes $\frac{1 - f}{1 + p}$.

And when $x = \infty$,
$$v = \frac{1}{e^f\, e^p} = e^{-(f+p)} = \frac{1}{1 + i}$$

$$\lambda v = \lambda \left(\frac{1}{1 + i}\right) = -\,(f + p)\, k = -\,(f + p) \times \cdot 43429448.$$

ANNUITIES AT RISKS VARYING ACCORDING TO SOME LAW.

(1.) The c is a constant ratio.

$A_n = \frac{1}{1 - cv_1}$ = the value of a perpetuity of £ 1 at a security-rate, of which c is the expression ; and taking $v_1 = \frac{1}{1 + p}$

$$A_\infty = 1 + cv_1 + c^2\, v_1^2 + c^3\, v_1^3 \ldots\ldots\ldots\ldots$$

$A_n = \frac{1 - c^n\, v_1^n}{1 - cv_1} = \frac{1}{1 - cv_1} - \frac{c^n\, v_1^n}{1 - cv_1}$ = the value of n payments of annuity, first payment due.

$A_{|n} = \frac{c^n\, v_1^n}{1 - cv_1}$ = the reversion of the annuity of £ 1, first payment at end of n years.

[*Note.*—If the payment depends upon several security-rates $c_1\ c_2\ c_3\ c_n,$ all remaining constant, the rate of interest being v_1 ; write $v_1\ c_1\ c_2\ c_3 \ldots c_n = v$, and the values of annuities in the above equations are found by simply substituting this v for cv_1.]

(2.) The c varies, and is expressed by fractions of the form $\frac{n - 1}{n}$, Demoivre's hypothesis.

The following formulas give the value of an annuity for n years, at such risk that one of the n sources from which it flows, fails every year.

This value is found directly from Tables of the form (p. clii) which the three next formulas exemplify.

Thus $A_n = \frac{N_n}{D_n}$ = value of the annuity of £ 1 on the above hypothesis until all the n sources fail, first payment due.

$A_{n;\,m} = \frac{N_n - N_{n-m}}{D_n}$ = value of annuity of £ 1 for m years, first payment due.

$A_{n\,|\,m} = \frac{N_{n-m}}{D_n}$ = the value of the reversionary annuity of £ 1, first payment at end of m years.

[*Note.*—n is the greatest possible afterlifetime = the *complement of life*, in Demoivre's phraseology. $n = \omega - x$, and $x = \omega - n$ = the assumed age of the life. Demoivre made $\omega = 86$ the limiting age ; and the complement of life at the age 20 was $86 - 20 = 66$. By making $n = 2\,E_x$ = twice the expectation of life by a correct Table, nearer approximations are obtained to the true value of the annuity. This was pointed out by Dr. Price and confirmed by Baily. I have found twice the probable lifetime ($2\,T_x$) give still nearer approximations to the true values at ages under 55.]

The following formulas give the values of annuities dependent on one, two, or three series of risks:—

$$A_x = \left(1 + \frac{1}{i}\right)\left(\frac{x - (V_x - 1)}{x}\right) = \left(1 + \frac{1}{i}\right)\left(\frac{xi + v^x - 1}{xi}\right)$$ = value of one of x annuities of £1, of which it is expected one will fail to be paid annually.

ANNUITY DEPENDENT ON TWO SERIES OF RISKS.

Put $a = x - \left(y + 1 + \frac{2}{i}\right)$, and then $A_{xy} = \frac{1 + i}{xi}\left\{x - \frac{2}{i} - \frac{V_y - 1}{y} \,.\, a\right\}$ = the value of an annuity payable during the joint existence of two lives or two firms; x and y being the numbers in the classes out of each of which one will fail annually until all are extinct. As $y < x$ the joint existence terminates necessarily in y years.

ANNUITY DEPENDENT ON THREE SERIES OF RISKS.

$x > y > z$ = the possible joint continuance of the three lives or firms.

$$\text{Putting } a = 2\,(x + y) - \left(z + 3 + \frac{6}{i}\right)$$

$$b = x + y - \left(2\,z + 3 + \frac{3}{i}\right)$$

$$c = (x - z - 1)\,(y - z - 1)$$

Then,—

$$A_{xyz} = \frac{1 + i}{xyi}\left\{xy - \frac{a}{i} + \frac{2\,b - ci}{iz}\,(V_z - 1)\right\}$$

$$= \frac{1 + i}{xyzi^2}\left\{xyzi - az + (2\,b - ic)\,(V_z - 1)\right\}$$ = value of annuity payable during the joint lives.

[*Note.*—Where the series $V_x - 1$, &c. is not in the Tables, $\frac{1 - v^x}{i}$, which is readily calculated, is substituted for it in the several formulas.

2. LIFE VALUES.

SYMBOLS OF THE LIFE TABLE.

d_x = numbers dying in the year [of age] after the age x.

d_{x+n} = numbers dying in the year of age after the age $x + n$.

[*Note.*—d_y, d_v, d_z are used when several lives are engaged.]

$l_0 = d_0 + d_1 \ldots + d_\omega$ = the numbers born alive; the base of the Life Table.

l_x = the numbers living at the precise age x.

l_{x+n} = the numbers living at the age n years older than the age x.

l_ω = approximation to zero, to which the numbers living are reduced at the last age in the Table.

$l_{x|n} = l_x - l_{x+n} = d_x + d_{x+1} + d_{x+2} \ldots\ldots + d_{x+n-1}$
= the numbers dying between the ages x and $x + n$.

$L_x = l_x + l_{x+1} + l_{x+2} \ldots + l_\omega$

$L_{x|n} = l_x + l_{x+1} \ldots\ldots + l_{x+n-1}$
= sum of the numbers attaining the ages x, $x+1$, . . . and $x + n-1$.

If £1 were paid to each of the l_x living at the age x, and to the numbers surviving at ages $x + 1$, $x + 2$, . . $x + n-1$, the $L_{x|n}$ would be the sum of the number of pounds to be probably paid.

P_x = normal population of the age x and under $x + 1$, and of the mean age $x+\frac{1}{2}$. For except in the first year $P_x = \frac{l_x + l_{x+1}}{2}$ nearly. The children dying in the first year die in very large proportions in the early months; consequently the population P_0 is considerably less than $\frac{l_0 + l_1}{2}$, and is not correctly represented by $l_{\frac{1}{2}}$, the numbers living in the middle of the year. The P_x in the after ages is represented by $l_{x+\frac{1}{2}}$.

$l_{x+\frac{1}{2}}$ = the numbers living in the middle of the year following the age x. It is taken to represent the mean numbers living through the year; that is, the years of life enjoyed between the age x and $x + 1$ by l_x persons.

If £$\frac{1}{365}$ were paid daily to each of l_x persons and their survivors, nearly $l_{x+\frac{1}{2}}$ pounds would be paid in the year.

$Q_x = P_x + P_{x+1} + P_{x+2} \ldots + P_\omega$.

= the normal population of the age x and upwards, maintained by l_x entering annually at the age x.

= the years of life which the l_x persons so entering will enjoy.

= the number of pounds nearly which would be paid if £$\frac{1}{365}$ were paid daily, or any small instalment of £$\frac{1}{m}$ were paid to l_x persons and their survivors m times a year.

$Q_{x|n} = Q_x - Q_{x+n} = P_x + P_{x+1} \ldots + P_{x+n-1}$.

Y_0 = the years which all the persons (Q_0) in a normal population have lived;

= the years of life which the population Q_0 will enjoy;

= the population which would be sustained by Q_0 annual immigrants of the tabular ages, if there were no births.

Y_x = the years which Q_x persons of the same ages as those of the Table will live:

= the years which the Q_x persons have lived over the age x.

= the ultimate number of members in a society that would be sustained by Q_x entering yearly.

FORMULAS FOR SOLVING PROBLEMS INVOLVING THE RATES OF MORTALITY AND THE DURATION OF LIFE.

$m_x = \frac{d_x}{P_x}$ = the rate of mortality in the year of age following age x; that is, in the $(x + 1)^{\text{th}}$ year.

$\mu_x = \frac{d_x}{l_x} = \frac{l_x - l_{x+1}}{l_x} = 1 - \frac{l_{x+1}}{l_x}$ = the probability—that is, the fraction expressing the probability—that a life X of the age x will live a year.

$p_x = \frac{l_{x+1}}{l_x} = \frac{l_x - d_x}{l_x} = 1 - \frac{d_x}{l_x} = 1 - \mu_x$ = the probability that X of the age x will live a year.

$$1 - p_x = \mu_x. \quad \therefore p_x + \mu_x = 1.$$

$p_{x \cdot n} = \frac{l_{x+1}}{l_x} \cdot \frac{l_{x+2}}{l_{x+1}} \cdot \frac{l_{x+3}}{l_{x+2}} \ldots \frac{l_{x+n}}{l_{x+n-1}} = \frac{l_{x+n}}{l_x}$, the probability that a life X [of average health is always understood in the common Tables] of age x will live n years.

$\mu_{x.n} = \frac{l_x - l_{x+n}}{l_x} = 1 - \frac{l_{x+n}}{l_x} = \frac{d_x}{l_x} + \frac{d_{x+1}}{l_x} \ldots + \frac{d_{x+n-1}}{l_x}$ = the probability that X will die in the next n years.

$\mu_{x+n-1} = \frac{d_{x+n-1}}{l_x}$ = probability that X will die in the n^{th} year after age x.

$T_x = \frac{l_x}{2} = l_{x+t}$. From this equation the PROBABLE LIFETIME — *vie probable*—is determined.

Thus $\frac{l_0}{2} = \frac{1000000}{2} = 500000$. And in the Table for Persons, p. 22, $l_{0+45} = 502915$, while $l_{0+46} = 495448$; consequently T_0 is more than 45, $(x + n)$, and less than 46, $(x + n + 1)$, years; or $l_{0+45\frac{2915}{7467}} = 500000$ if $d_{45} = 7467$ deaths occur at equal intervals in the year. The T_0 = probable lifetime is $45\frac{2915}{7467}$. At age 20 the $\frac{l_{20}}{2} = l_{20+t} = \frac{662750}{2} = 331375 = l_{20+43\frac{3228}{12572}}$. The $T_{20} = 43\frac{3228}{12572} = 43\frac{1}{4}$ years = probable lifetime. See Table 6. (p. cli) for all the values of T_x.

Demoivre calls that "the *Complement of Life* [n] which "remains from the age given to the time of the "extinction of life, which will be at 86 according to "our hypothesis. Thus, supposing an age of 50, "because the difference between 50 and 86 is 36, "I call 36 the *Complement of Life*." *

By his hypothesis the probable lifetime = Expectation of Life; but this is not the case when a correct Life Table is used. In some investigations it will be found convenient to use as the Complement of Life twice the probable lifetime; putting Demoivre's $n = 2\,T_x$.

The POSSIBLE LIFETIME by the English Table is 109 years $= \omega$; and the possible afterlifetime of X aged x is $(109 - x)$ years.

$\frac{Q_x}{l_x} = E_x$ = the mean *afterlifetime*, or, as it is often called, the expectation of life.

[*Note.*—If an annuity of £1 were paid in any great number of instalments (m) in the year, at equal intervals, E_x would be on an average the amount paid on each life; while $\frac{L_x}{l_x}$ is the average amount paid under a Life Annuity system; and is the value of A_x when money is assumed to bear no interest.]

$G_x = x + \frac{Q_x}{l_x}$ = the mean age at death of persons now aged x years.

$E'_x = \frac{Y_x}{Q_x}$ = the mean *afterlifetime* of the living (Q_x) of the age x and upwards.

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* Demoivre, "Treatise of Annuities on Lives." Second Edition. Part I.

$x + E'_x =$ the mean age of the living (Q_x) of the age x and upwards.

[*Note.*—At birth $x = 0$, this is the mean age of the normal population.]

$x + E_x =$ mean age at death of males (l_x) of the age x;

$=$ mean age of all who die after attaining the age x in a normal population.

$x + 2\,E'_x =$ mean age at death of the living (Q_x) of the age x and upwards.

$S = a\,\dfrac{Q_{x|n}}{l_x} =$ the number of members of any society, or army, between the ages x and $x+n$, maintained by a annual recruits of age x, when death is the only casualty.

$a = \dfrac{S\,l_x}{Q_{x|n}} =$ annual recruits of such a society.

$b = \dfrac{S\,l_{x+n}}{Q_{x|n}} =$ annual numbers leaving the society at age $x + n$.

$d = \dfrac{S\,l_{x|n}}{Q_{x|n}} =$ annual deaths in such a society of S members.

If the society is a city of stationary population, consisting of S persons of all ages, in the normal proportions:

$d = \dfrac{S\,l_0}{Q_0} =$ annual deaths.

$=$ annual births.

$S = \dfrac{Q_0}{l_0}\,.\,d =$ the population $- dE$.

[*Note.*—The population of a country is determined approximatively, when the births or deaths and the mean lifetime are known.]

$\dfrac{Y_{x|n}}{Q_{x|n}} = \dfrac{Y_x - Y_{x+n}}{Q_x - Q_{x+n}} =$ mean afterlifetime of persons of the age x and under $x + n$.

$S = a\,\dfrac{Y_{x|n}}{Q_{x|n}} =$ number of persons in a society ultimately, if joined annually by a members of ages x and under $x + n$ in normal proportions.

$S_n = a\left(\dfrac{Y_{x|n} - Y_{x+m|n}}{Q_{x|m}}\right) =$ the number of persons to which a society joined by a persons of the tabular ages x and under $x + m$ would amount in n years.

VALUES DEPENDENT ON THE CONTINGENCIES OF ONE LIFE X OF THE AGE x.

Annuities.

$A_x = \frac{N_x}{D_x} = \frac{1}{a_x} = \frac{1}{\pi_x + d}$ = initial value of an annuity of £1 on the life of X; first payment at his present age x, last at the beginning of the year preceding his death.

$A_{xn} = \frac{N_x - N_{x+n}}{D_x} = \frac{N_{x|n}}{D_x}$ = value of a temporary annuity on Life X; first payment at age x, last at $x + n - 1$, if X be then alive.

$A_{x|n} = \frac{N_{x+n}}{D_x}$ = value of a *deferred annuity* on Life X; first payment at age $x + n$, if X be then alive.

$A_{x|1} = \frac{N_{x+1}}{D_x}$ = value of an annuity of £1 on X; first payment at age $x + 1$. This is the A of the old and of many modern writers.

$a_x = \frac{D_x}{N_x} = \frac{1}{A_x}$ = the annuity on life X which £1 will purchase, first payment at age x.

$a_{xn} = \frac{D_x}{N_{x|n}} = \frac{1}{A_{xn}}$ = temporary annuity which £1 will purchase for n years on life X.

$a_{x|n} = \frac{D_x}{N_{x+n}} = \frac{1}{A_{x|n}}$ = deferred annuity which £1 will purchase on life X; first payment at age $x + n$.

$\frac{N_{x+n|m}}{D_x}$ = the value of an annuity of £1 on X; first payment at age $x + n$, and to be continued until age $x + n + m - 1$, if X live so long. The following is a particular case:—

$\frac{D_{x+n}}{D_x} = \frac{N_{x+n} - N_{x+n+1}}{D_x}$ = the value of an *Endowment* of £1 payable if X be alive at the age $x + n$.

$\frac{D_{x+n}}{D_x - M_{x|n}}$ = the single premium for an endowment of £1; the *premium* to be returned six months after death if X die before the age $x + n$.

[*Note.*—When an annuity is paid at the beginning of every year of life by X to provide a deferred annuity or a single sum, it is called an annual premium, which has all the properties of a life annuity.]

$\pi'_{xn} = \frac{N_{x+n}}{N_{x|n} - R_{x|n} + nM_{x+n}}$ = annual premium payable by X from age x to age $x + n - 1$ to provide a deferred annuity of £1, first payment at age $x + n$: the premiums to be returned in the event of his death before the age $x + n$.

If the premiums are not to be returned, strike out the terms $(-R_{x|n} + nM_{x+n})$.

The following is the particular case in which $N_{x+n|1}$ is substituted for N_{x+n}.

$\pi'_{xn} = \dfrac{D_{x+n}}{N_{x|n} - R_{x|n} + nM_{x+n}}$ = annual premium payable by or for X from his age x to age $x + n - 1$, to provide £1 as an *Endowment* at age $x + n$; the premiums to be returned in the event of death, six months after its date.

The equation $\pi\ N_{x|n} = aN_{h|c}$ furnishes several useful formulas.

$\dfrac{aS_{x|n}}{D_x}$ = the value of an annuity on X of £a commencing at £a now due, and increasing by £a every year, so as to be a, $2a$, $3a$ . . . na at the n^{th} payment, when it remains stationary.

$\dfrac{a\,(S_{x|n} - nN_{x+c})}{D_x}$ = value of annuity on X, increasing annually until the n^{th} payment, when it is £na; ceasing at death or at age $x + c - 1$. Here let $c > n$; or $c = n$.

[*Note.*—The determination of all the various values of annuities increasing or decreasing yearly or at intervals in arithmetical ratios are facilitated by the columns N_x and S_x; the S_x, as it will be seen, is $= D_x + 2\,D_{x+1} + 3\,D_{x+2} + 4\,D_{x+3}$ . . .]

Insurance for a Single Year at age x.

The policy is payable at the end of the death-year.

$\dfrac{C_x}{D_x}$ = the premium which will insure for a year £1 on the life X at age x.

$\dfrac{D_x}{C_x}$ = the sum which a premium of £1 will insure for a year on the life X at age x.

Insurance for the whole Term of Life by a Single Premium at age x.

Note.—These values can be calculated either by the series M_x, or N_x in combination with D_x, which are thus related :

$$\begin{aligned} D_x &= dN_x + M_x \\ M_x &= D_x - dN_x = vN_x - N_{x+1} \\ M_{x+n} &= D_{x+n} - dN_{x+n} \\ M_{x|n} &= D_{x|n} - dN_{x|n} \end{aligned}$$

$$N_x = \frac{D_x - M_x}{d} = \frac{1+i}{i}\,(D_x - M_x) = V_\infty\,(D_x - M_x)$$

$$N_{x|n} = \frac{D_{x|n} - M_{x|n}}{d};\ A_x = \frac{N_x}{D_x} = \frac{1 - \Pi_x}{d}$$

$\Pi_x = \frac{M_x}{D_x}$ = the single premium insuring £1 on the life X at age x.

$= 1 - dA_x = 1 - d\frac{N_x}{D_x}$

$\Sigma_x = \frac{D_x}{M_x} = \frac{1}{\Pi_x}$ = sum which £1 will insure on the life X at age x.

$\Pi_{xn} = \frac{M_{x|n}}{D_x}$ = single premium at age x to insure £1, payable if X die in less than n completed years.

$= \frac{D_{x|n} - dN_{x|n}}{D_x}$

$\Pi_{x|n} = \frac{M_{x+n}}{D_x} = \frac{D_{x+n} - dN_{x+n}}{D_x}$ = single premium to insure at age x £1 payable at the death of X if it happen after the age $x + n$. This is a deferred insurance.

$s\frac{R_{x|n}}{D_x}$ = present value of an increasing insurance on X, namely £s, if death happen in the first year, £$(2s)$ if it happen in the second year, and £ns if it happen in the nth year, or after that year.

Insurance for the whole Term of Life by Annual Premiums.

$\pi_x = \frac{M_x}{N_x} = a_x - d = a_x + v - 1$ = the annual premium insuring £1 on the life X. And $s_x = \frac{N_x}{M_x} = \frac{1}{\pi_x}$ = sum which the annual premium of £1 will insure.

$\pi_{xn} = \frac{M_{x|n}}{N_{x|n}} = \frac{D_{x|n}}{N_{x|n}} - d$ = the annual premium for n years to insure £1 for that term on the life X.

$\pi_{xn} = \frac{M_x}{N_{x|n}} = \frac{D_x - dN_x}{N_{x|n}}$ = the annual premium for n years, to insure £1 payable at the end of the year in which X shall die, without restriction as to time.

$\pi_2 = \frac{sM_x}{N_x + e\,(N_{x+b} + N_{x+2b} \cdots\cdots + N_{x+(m-1)b})}$ = the premium for b years, which, augmenting at the end of b years to $(1 + e)\,\pi_2$ for a second series of b years; and of $\{1 + (m - 1)\,e\}\,\pi$ in the mth consecutive series, extending over life, will provide £s, payable at the end of the year in which X, now age x, shall die.

Value of Policies, and the Amounts in Deposit.

aA_{x+n} = the value of the annuity of £ a due on the life X at the age $x + n$; this is the amount which an annuity society should have in deposit—to the account of the life X. The sum of these values should be in deposit.

$\pi_x \, A_{x+n}$ = the value at age $x + n$ of the future annual premiums payable on or by life X, at and after age $x + n$.

$\pi \dfrac{N_{x|n}}{D_{x+n}}$ = the amount in deposit at the age $x + n$ properly belonging to X before the payment of the deferred annuity commences, in a fund provided by any annual premium (π).

$s \, \Pi_{x+n}$ = the value at age $x + n$ of a sum insured.

Let H_{x+n} be the sum in deposit at the end of n years, on account of a policy taken out at age x.

(1.) ${}_1H_{x+n} = \Pi_{x+n} - \pi_x \, A_{x+n}$ = the sum in deposit immediately before the $(n + 1)^{\text{th}}$ premium is due, to each £ 1 insured at age x by net annual premium π_x.

That is the sum to be expected in deposit for every £ 1 insured. If all the policies of an extensive office, operating with Tables correctly representing the rates of mortality and interest, are thus determined, the total sum of the deposits will, with the future premiums, pay the sums insured.

$$(2.) \quad {}_2H_{x+n} = \frac{\pi \, N_{x|n} - s \, M_{x|n}}{D_{x+n}}$$

$$= \pi \frac{N_{x|n} - s\,(D_{x|n} - d\,N_{x|n})}{D_{x+n}}$$

$$= \frac{(\pi + sd)\,N_{x|n} - s\,D_{x|n}}{D_{x+n}}$$

= the expected sum in deposit at the end of n years, after n premiums (£ π) have been paid at the beginning of each year, and £ s has been paid at the end of the year of each death, be π and s any values whatsoever. This deposit may be a negative quantity.

(3.) ${}_3H_{x+n} = s\,\Pi_{x+n} - \pi\,A_{x+n}$ = the sum in deposit, which, with the future premiums π, will insure £ s, be π and s what they may.

When $\pi = \pi_x$, and $s = 1$; or when $s\,\pi = s\,\pi_x$, we have these identities:—

$${}_1H_{x+n} = \frac{\pi\,N_{x|n} - s\,M_{x|n}}{D_{x+n}} = \frac{(\pi + sd)\,N_{x|n} - s\,D_{x|n}}{D_{x+n}}$$

$$= \Pi_{x+n} - \pi_x\,A_{x+n} = 1 - a_x\,A_{x+n}.$$

The expected sum in deposit (${}_1H$) is the value of the policy, and with the future net premiums may be justly expected to pay the policy; while the two values under ${}_2H$ and ${}_3H$ are independent of any fixed relation between the values of π and s.

VALUES DEPENDENT UPON TWO LIVES, X OF AGE x AND Y OF AGE y.

Annuities.

$A_{xy} = \frac{N_{xy}}{D_{xy}}$ = the present value of a joint annuity; first payment now due, and no payment after the first death.

$A_{x|y} = A_x - A_{xy} = \frac{1}{\pi_x + d} - A_{xy}$ = value of an annuity of £ 1 on X; first payment at the end of the year in which Y shall die, the claim lapsing at the death of X.

$A_{y|x} = A_y - A_{xy}$ = value of a similar annuity of £ 1 on Y. This is a reversionary annuity, and partakes of the nature of a deferred annuity on the life Y.

$A_{\overline{xy}} = A_x + A_y - A_{xy} = A_{xy} + A_{x|y} + A_{y|x}$ = the value of an annuity of £ 1 on the longest of the two lives X and Y. This is equivalent to the value of the three preceding annuities;—(1) an annuity on the joint lives; (2) on the life of X after Y; and (3) on the life of Y after X.

$A_{\overline{xy},n} = \frac{N_{x|n}}{D_x} + \frac{N_{y|n}}{D_y} - \frac{N_{xy|n}}{D_{xy}}$ = value of annuity of £ 1 on longest life for the term of n years.

$A_{\overline{xy}|n} = \frac{N_{x+n}}{D_x} + \frac{N_{y+|n}}{D_y} - \frac{N_{xy+n}}{D_{xy}}$ = value of annuity of £ 1 on longest life—deferred n years; first payment at age $x + n$.

$a_{xy} = \frac{D_{xy}}{N_{xy}} = \frac{1}{A_{xy}}$ = the joint annuity on X and Y, of which £ 1 is the value.

$a_{x|y} = \frac{1}{A_{x|y}}$; $a_{y|x} = \frac{1}{A_{y|x}}$

$a_{\overline{xy}} = \frac{1}{A_x + A_y - A_{xy}}$ = the annuity on the longest life, of which £ 1 is the value.

$$A_{xyn} = \frac{N_{xy\,|\,n}}{D_{xy}}$$

$$= \frac{N_{xy} - N_{x+n\,.\,y+n}}{D_{xy}}$$

= the value of a temporary joint annuity of £1 on the two lives X and Y, to cease after n payments, or at the death of the first.

$$A_{xy\,|\,n} = \frac{N_{x+n\,.\,y+n}}{D_{xy}} = \frac{N_{(xy)+n}}{D_{xy}}$$

= the value of a deferred joint annuity of £1 on the lives X and Y, the first payment if X and Y are then alive, at the end of n years. Annual premium $= \frac{N_{xy+n}}{N_{xy\,|\,n}}$.

Insurances by Single Premiums.

$$M_{xy} = D_{xy} - dN_{xy} = C_{xy} + C_{xy+1} + C_{xy+2} \cdot \cdot \cdot \cdot \cdot \cdot$$

[*Note.*—$C_{xy} = v^{\frac{x+y}{2}+1} (l_{xy} - l_{(xy)+1})$.]

$$M_{xy\,|\,n} = D_{xy\,|\,n} - dN_{xy\,|\,n} = vN_{xy\,|\,n} - N_{(xy)+1\,|\,n}$$

$\Pi_{xy} = 1 - d\,A_{xy} =$ the value of £1 payable at the end of year of first death.

$\Pi_{\overline{xy}} = 1 - d\,A_{\overline{xy}} = 1 - d\,(A_x + A_y - A_{xy}) =$ the value of £1 payable at the end of the year of the last death.

[*Note.*—These are also single premiums to insure £1.]

$\Pi_{\overline{\overline{xyn}}} = \dfrac{D_{xy\,|\,n} - dN_{xy\,|\,n}}{D_{xy}} =$ value of £1 payable if either X or Y, or both, die in n years, on the first death.

$\Pi_{xy\,|\,n} = \dfrac{D_{(xy)+n}}{D_{xy}} - d\left(\dfrac{N_{(xy)+n}}{D_{xy}}\right) =$ value of £1 payable if X or Y die after n years, on the first death.

$$\Pi_{\overline{xy},\,n} = \Pi_{xn} + \Pi_{yn} - \Pi_{xyn} = \Pi_{\overline{xy}} - \Pi_{\overline{xy}\,|\,n}$$

= value of £1 payable if X and Y die in n years, on the last death.

$$\Pi_{\overline{xy}\,|\,n} = \frac{M_{x+n}}{D_x} + \frac{M_{y+n}}{D_y} - \frac{M_{xy+n}}{D_{xy}}$$

$= \Pi_{x\,|\,n} + \Pi_{y\,|\,n} - \left(\dfrac{D_{xy+n} - dN_{xy+n}}{D_{xy}}\right) =$ value of £1 payable if X and Y die after n years, on the last death.

Insurances by Annual Premiums.

$\pi_{xy} = a_{xy} - d = \dfrac{D_{xy}}{N_{xy}} - d =$ the annual premium payable during the joint lives of X and Y, to insure £ 1 payable on the first death.

$\pi_{\overline{xy}} = a_{\overline{xy}} - d =$ annual premium payable during the longest life to insure £ 1 at its death.

$\pi_{xyn} = \dfrac{D_{xy \mid n}}{N_{xy \mid n}} - d =$ annual premium payable, while both live, by X and Y for n years to insure £ 1 payable on the first death that may happen in the time.

$\pi_{\overline{xy}\, n} = \dfrac{\Pi_{\overline{xy}\, n}}{A_{\overline{xy}\, n}} =$ annual premium payable during the longest life of X and Y for n years, if either live so long, to insure £ 1 at the end of the year of the last death.

$\pi'_{xy \mid n} = \dfrac{N_{(xy)+n}}{N_{xy \mid n}} =$ annual premium jointly payable by X and Y to provide a deferred joint annuity of £ 1.

$\pi'_{x \mid y} = \dfrac{A_{x \mid y}}{A_{xy}} = A_x \cdot a_{xy} - 1 = \dfrac{N_x}{D_x} \cdot \dfrac{D_{xy}}{N_{xy}} - 1 =$ annual premium during joint life of X and Y to insure annuity of £ 1 to X after death of Y. This annuity provides for a Widow.

Insurances dependent on the Order in which the Death of X *or* Y *happens.*

The sum insured is due at the end of the year of age in which the specific death happens; and there are four cases on which this insurance may depend: (1) the death of X, if it happen first, $(\overset{1}{x}y)$; (2) the death of X, if it happen second, $(\overset{2}{x}y)$; (3) the death of Y, if it happen first, $(x\overset{1}{y})$; (4) the death of Y, if it happen second, $(x\overset{2}{y})$.

$$\Pi_{\overset{1}{x}y} = \frac{vN_{xy} + v^{\frac{1}{2}}\,(N_{x,\,y+1} - N_{x+1,\,y}) - N_{x+1,\,y+1}}{2\,D_{xy}}$$

or $\Pi_{\overset{1}{x}y} = \dfrac{vN_{xy} + v^{\frac{1}{2}}\,N_{x,\,y+1} - v^{\frac{1}{2}}\,N_{x+1,\,y} - N_{x+1,\,y+1}}{2\,D_{xy}} =$ value of £ 1 at the death of X, if first. This is an insurance on X against Y.

And $\Pi_{x\overset{1}{y}} = \dfrac{vN_{xy} + v^{\frac{1}{2}}\,N_{x+1,\,y} - v^{\frac{1}{2}}\,N_{x,\,y+1} - N_{x+1,\,y+1}}{2\,D_{xy}} = \dfrac{\frac{1}{2}\,(a-b)}{D_{xy}} =$ value of £ 1 at the death of Y, if first. This is an insurance on Y against X.

[*Note.*—The formula is applicable if X or Y is either the oldest or youngest life by the English Life Tables; and by substituting $N_{xy \mid n}$ for N_{xy}, $N_{x,\,y+1 \mid n}$ for $N_{x,\,y+1}$, &c. &c., the value of the insurance for n years is found. The deferred insurance is found by putting $N_{(xy)+n}$ in the place of N_{xy}, &c. &c.]

By addition—

$$\Pi_{xy} = \Pi_{\overset{1}{x}y} + \Pi_{x\overset{1}{y}} = 1 - dA_{xy} = \text{value of £1 at the first death of either X or Y.}$$

$$\therefore \Pi_{\overset{1}{x}y} = \Pi_{xy} - \Pi_{x\overset{1}{y}}\,;\ \Pi_{x\overset{1}{y}} = \Pi_{xy} - \Pi_{\overset{1}{x}y}$$

$$\text{and } \Pi_{xx} = \Pi_{\overset{1}{x}x} + \Pi_{x\overset{1}{x}}\,;\ \Pi_{xx} = 2\,\Pi_{\overset{1}{x}x}\,;\ \Pi_{\overset{1}{x}x} = \tfrac{1}{2}\,\Pi_{xx}$$

It will be observed that $vN_{xy} - N_{x+1,\,y+1} = M_{xy}$ in these equations, which if we put $v^{\frac{1}{2}}(N_{x,\,y+1} - N_{x+1,\,y}) = b$, may be written thus:—

$$\Pi_{\overset{1}{x}y} = \frac{M_{xy}}{2\,D_{xy}} + \frac{b}{2\,D_{xy}} = \frac{\Pi_{xy}}{2} + \frac{b}{2\,D_{xy}}\,;\ \text{and } \Pi_{x\overset{1}{y}} = \frac{\Pi_{xy}}{2} - \frac{b}{2\,D_{xy}}$$

$$\text{Also, } \pi_{\overset{1}{x}y} = \frac{M_{xy}}{2\,N_{xy}} + \frac{b}{2\,N_{xy}} = \frac{\pi_{xy}}{2} + \frac{b}{2\,N_{xy}}$$

$$\pi_{x\overset{1}{y}} = \frac{\pi_{xy}}{2} - \frac{b}{2\,N_{xy}}$$

But $\Pi_{x} = \Pi_{\overset{1}{x}y} + \Pi_{\overset{2}{x}y}$ = value of £1 payable at end of year in which the death of X happens, be it when it may; it is the premium to insure £1.

$\therefore \Pi_{\overset{2}{x}y} = \Pi_{x} - \Pi_{\overset{1}{x}y}$ = value of £1 payable at the end of year of the death of X, if he die second of the two; that is, after Y.

$\Pi_{x\overset{2}{y}} = \Pi_{y} - \Pi_{x\overset{1}{y}}$ = value of £1 payable at the end of the year of the death of Y, if he die the second of the two lives; that is, after X.

$\Pi_{\overline{xy}} = \Pi_{\overset{2}{x}y} + \Pi_{x\overset{2}{y}} = \Pi_{x} + \Pi_{y} - \Pi_{xy} = \Pi_{x} + \Pi_{y} + dA_{xy} - 1$ = the value of £1 to be paid at the death of the longest life, whether it be X or Y.

$$\Pi_{\overline{xx}} = \Pi_{\overset{2}{x}x} + \Pi_{x\overset{2}{x}} = 2\,\Pi_{x} - \Pi_{xx}.$$

The Annual Premium to insure £1 at the death of the first life is usually paid during the Joint Lives only.

$$\text{So } \frac{\Pi_{xy}}{A_{xy}} = \frac{\Pi_{\overset{1}{x}y}}{A_{xy}} + \frac{\Pi_{x\overset{1}{y}}}{A_{xy}} = \pi_{xy} = \pi_{\overset{1}{x}y} + \pi_{x\overset{1}{y}} = a_{xy} - d$$

The annual premium to insure £1 at the death of the longest life is usually paid during the longest life.

$$\text{Hence } \frac{\Pi_{\overline{xy}}}{A_{\overline{xy}}} = \frac{\Pi_{\overset{2}{x}y}}{A_{\overline{xy}}} + \frac{\Pi_{x\overset{2}{y}}}{A_{\overline{xy}}} = \pi_{\overline{xy}} = \pi_{\overset{2}{x}y} + \pi_{x\overset{2}{y}}$$

$$\text{and } \frac{\Pi_{\overline{xx}}}{A_{\overline{xx}}} = \frac{\Pi_{\overset{2}{x}x}}{A_{\overline{xx}}} + \frac{\Pi_{x\overset{2}{x}}}{A_{\overline{xx}}} = \pi_{\overline{xx}} = 2\,\pi_{\overset{2}{x}x}$$

$\pi_{\overset{2}{x}x} = \dfrac{\pi_{\overline{xx}}}{2}$ = annual premium payable during last of two lives X_1 and X_2, now age x, to insure £1 at the death of X_2 designated, provided he be the last to die.

Dr. Price's Rule for deducing from the correct Values of Annuities A_x &c. on Single or Joint Lives at any one Rate of Interest the approximate Values of Annuities on the same Lives at any other Rate of Interest.

Let A_{xy} = the *first* or computed value of the annuity at *one* rate of interest.

B_{xy} = the *second value* of the annuity at the same rate of interest, deduced from the expectations of life upon Demoivre's hypothesis. (*See* pages lxxxiv and cli.)

C_{xy} = the *third value* of the annuity at any other rate of interest, deduced from the same formula as B_{xy}.

Then $A_{xy} - (B_{xy} - C_{xy})$ = the approximate value of A_{xy} at that other rate of interest.

Baily illustrates this rule for single lives, and adds: "The same principles will
" apply to the case of two joint lives; and it will be found that in both cases the
" deduced values are sometimes nearly the same as the correct values; that,
" generally, they do not differ more than a 20th or 30th part of a year's purchase;
" that in *joint* lives they differ less than in single lives; and that they come equally
" near to each other *whatever* the rates of interest are." *

VALUES DEPENDENT UPON THREE LIVES, X OF AGE x, Y OF AGE y, AND Z OF AGE z.

Annuities and Insurances.

The annuities for three lives (three males), (two males and one female), (one male and two females), (three females) are readily deduced from the series for two lives. The series $\lambda\, l_x$ and $\lambda\, l_y$ on stiff calculating paper will facilitate the calculation.

Make Z the oldest life.

Then $D_{xy} = v^{\frac{x+y}{2}} l_x \cdot l_y$; and $D_{xyz} = v^{\frac{x+y}{2}} l_x \cdot l_y \cdot l_z$; and $\lambda D_{xyz} = \lambda D_{xy} + \lambda l_z$. The sum of the series D_{xyz} is N_{xyz}; and $A_{xyz} = \frac{N_{xyz}}{D_{xyz}}$. For a joint annuity for n years

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* Baily on Life Annuities, Filipowski's edition, p. 194.

$A_{xyzn} = \frac{N_{xyz|n}}{D_{xyz}} = \frac{N_{xyz} - N_{(xyz)+n}}{D_{xyz}}$, it is only necessary to calculate n terms of the series; for a deferred annuity only D_{xyz} and the terms commencing at ages $(xyz) + n$, the series always terminating when any factor becomes $l_\omega = 0$. The various series for any number of lives are calculated in the same way; and the calculation is required when accurate results are desired. Approximative results are obtained from the same tables by shorter methods.

This is Simpson's rule for finding the value of an annuity on three joint lives, X, Y, and Z :—*

Let X be the youngest and Z the oldest of *three* proposed lives: take the value of the *two* joint lives Y and Z from the Two-Life Table, and find the *age* of a single life U of the same value by the Single-Life Table; then find the value of the annuity on the joint lives X and U, which will be the answer.

The rule is thus compendiously expressed:—Find $A_u = A_{yz}$; and $A_{ux} = A_{xyz}$ nearly. In the case of four lives W, X, Y, Z, take $A_{wx} = A_v$, and $A_{yz} = A_u$; then $A_{uv} = A_{wxyz}$ nearly. Baily deducts ·05 from the thus-found value when the oldest life is under 70 years of age and the youngest is not under 10. This rule is adopted without restriction as to age in the Succession Act.

[*Note.*—The logarithms of A_u, A_{yz}, &c. are most convenient for use.]

The following is Simpson's rule for finding the value of an annuity on the longest of three lives, X, Y, and Z :—

Let $A_{yz} = A_w$; then $A_{\overline{xz}} + A_{\overline{xy}} - A_{\overline{xw}} = A_{\overline{xyz}}$ = the value of an annuity of £1 on the longest of the three lives.

A_{xyz} = the value of an annuity of £1 on three joint lives; it ceases at the first death.

$A_{\overset{2}{\overline{xyz}}} = A_{xy} + A_{xz} + A_{yz} - 2\,A_{xyz}$ = the value of an annuity of £1 on the last two—whether they be XY or XZ or YZ—out of three lives; it ceases at the *second* death.

$A_{\overline{xyz}} = A_x + A_y + A_z - A_{xy} - A_{xz} - A_{yz} + A_{xyz}$ = the value of an annuity of £1 on the longest of three lives; it goes on as long as X or Y or Z is alive, and ceases at the *third* death.

$\Pi_{xyz} = 1 - dA_{xyz}$ = single premium to insure £1 at *first* death [payable at the end of death-year of X or Y or Z].

$\Pi_{\overset{2}{\overline{xyz}}} = 1 - dA_{\overset{2}{\overline{xyz}}}$ = single premium to insure £1 at *second* death.

$\Pi_{\overline{xyz}} = 1 - dA_{\overline{xyz}}$ = single premium to insure £1 at *third* death.

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* Supplement to Doctrine of Annuities, by T. Simpson, 1791, page 25.

$\pi_{xyz} = \frac{1}{A_{xyz}} - d = a_{xyz} - d =$ annual premium to insure £1 at *first* death.

$\pi_{\overset{2}{xyz}} = \frac{1}{A_{\overset{2}{xyz}}} - d = a_{\overset{2}{xyz}} - d =$ annual premium to insure £1 at *second* death.

$\pi_{\overline{xyz}} = \frac{1}{A_{\overline{xyz}}} - d = a_{\overline{xyz}} - d =$ annual premium to insure £1 at *third* death: the premium is paid at the beginning of every year of age attained by the longest life, and the sum insured at the end of his death-year.

To pass to $A_{xyz,n}$ &c. *see* section of Two Lives.

Reversionary Life Annuities and Survivorships.

$A_{x|yz} = A_x - A_{xyz} =$ value of annuity of £1 on life of X; first payment at end of year of age in which Y or Z shall die.

$A_{xy|z} = A_{xy} - A_{xyz} =$ value of joint annuity of £1 on lives of X and Y; to commence at death of Z and cease at first death of either X or Y.

$A_{x|\overline{yz}} = A_x - A_{xy} - A_{xz} + A_{xyz} =$ value of annuity of £1 on life of X; to commence at the *last death* of Y or Z.

$A_{\overline{xy}|z} = A_x + A_y - A_{xy} - A_{xz} - A_{yz} + A_{xyz} =$ value of annuity of £1 on the longest life X or Y; to commence at the death of Z.

[*Note.*—The whole value of each of these annuities is A_x, or A_{xy} or $A_{\overline{xy}}$, as the case may be; and the part cut off is held to belong to the lives in *possession*, while the above values belong to the lives in *reversion.*]

When the annuity for the longest life is divided at each payment equally between the survivors of three lives, the value of each share is thus given:—

X has $G_{x(yz)} = A_x - \frac{1}{2}(A_{xy} + A_{xz}) + \frac{1}{3}A_{xyz}$

Y has $G_{y(xz)} = A_y - \frac{1}{2}(A_{xy} + A_{yz}) + \frac{1}{3}A_{xyz}$

Z has $G_{z(xy)} = A_z - \frac{1}{2}(A_{xz} + A_{yz}) + \frac{1}{3}A_{xyz}$

The sum of the three values is $= A_{\overline{xyz}}$.

VALUES DEPENDENT UPON FOUR OR MORE (n) LIVES.

Annuities.

The method for deriving the value of joint annuities on four or any number of lives has been described in treating of three lives. They are all derivable from the series $D_{xy}\, l_u\, l_v\, l_w\, l_z \ldots$, of which the separate logarithms are printed. And the notation and formulas already given admit of indefinite extension; but the number of combinations of lives in cases of frequent occurrence is so great that each case has to be separately considered, and it is only possible to indicate methods of invention to which the notation lends itself.

Let the ages of the lives U, V, W, X, Y, Z, &c. all be denoted by u, v, w, x, y, z, &c.; then these suffixes, detached from p and A, may be operated on independently and thus supply new suffixes. Thus the probability that X will be alive and Y and Z be both dead is thus found: Put $x \mid \overline{yz} = x(1-y)(1-z) = x - xy - xz + xyz$. Then $p_{x\,.\,n} - p_{xy\,.\,n} - p_{xz\,.\,n} + p_{xyz\,.\,n}$ is the probability that X will be alive and both Y and Z be dead in n years; and the present value of a sum dependent on those chances is $v^n(p_{x\,.\,n} - p_{xy\,.\,n} - p_{xz\,.\,n} + p_{xyz\,.\,n})$, from which the values of the annuity dependent on the chances are derived, $A_x - A_{xy} - A_{xz} + A_{xyz}$.

Thus, taking five (or n) lives, let $A_{\overline{vwxyz}}$ be the value of an annuity of £1 on the longest life—that is, payable as long as any one of the five lives is in existence when the annual payment is due; and $A_{\overset{2}{\overline{vwxyz}}}$ = the value of an annuity of £1 payable so long as any two of the lives survive; $A_{\overset{m}{\overline{vwxyz}}}$ the value of an annuity for as long as any number m of the lives survive. Then the suffixes of $A_{\overset{5}{\overline{vwxy.c}}}$ are readily found from the annexed scheme; so are those of $A_{\overset{4}{\overline{vwxyz}}}$, and $A_{\overset{3}{\overline{vwxyz}}}$, and $A_{\overset{2}{\overline{vwxyz}}}$, and $A_{\overset{1}{\overline{vwxyz}}}$. The first annuity is payable during the whole of the joint lives—that is, until the year of the death of one of them—and is, for the sake of simplicity, written A_{vwxyz}; and as regards the last, the small figure over the bar is usually dropped. The same notation and method of invention are applicable to any number of lives.

To effect the passage to values dependent on temporary or deferred annuities, it is only necessary to substitute the values of such annuities found in the usual way for life-long annuities; the suffixes otherwise remain the same.

The suffixes of reversionary annuities on lives are readily found. Thus let $wx \mid \overline{yz} = wx(1-y)(1-z)$; also $w \mid \overline{xyz} = w(1-x)(1-y)(1-z)$: then the expansion gives the suffixes. And let $\overline{wx} \mid yz = \{1-(1-w)(1-x)\}(1-yz)$ $= (w+x-wx)(1-yz) = w+x-wx-wyz-xyz+wxyz$: so also let $\overline{wxy} \mid z = \{1-(1-w)(1-x)(1-y)\}(1-z)$. And in all cases the same notation supplies the suffixes: thus $\overline{vwxy} \mid z = \{1-(1-v)(1-w)(1-x)(1-y)\}$ $(1-z)$; and $v \mid \overline{wxyz} = v(1-w)(1-x)(1-y)(1-z)$. The cut-off letters are subtracted from unity collectively or separately, according as they are free or under the band. In the case $A_{\overline{uvw}\,|\,\overline{xyz}} = A_{\overline{uvwxyz}} - A_{\overline{xyz}}$, this is the value of an annuity of £ 1 for the longest life of the six, of which the lives X Y Z are in possession, and which only falls to the reversioners after the extinction of the last life of the three in possession.

The number of terms involving 1, 2, 3 . . . m lives out of n is shown by the Binomial Table; and in the equation for the suffixes of $A_{\overset{m}{\overline{uvwxyz}}}$ the co-efficient of the first set of terms (S_0) will be 1, of the second set S_1 it will be m, of the third $\frac{m \cdot m+1}{1 \cdot 2}$, of the fourth $\frac{m(m+1)(m+2)}{1 \cdot 2 \cdot 3}$ . . . . Putting S_0 for the value of the annuity on the combination of m lives in the first set of terms, S_1 for the value of the annuities on the combination of the $(m+1)$ lives . . . .

Then the value of the annuity on n lives, to continue as long as any m of them survive, will be,—

$$A_{\overset{m}{\overline{uvwxyz, \text{ \&c. to } n}}} = S_0 - m\,S_1 + \frac{m(m+1)}{1 \cdot 2}\,S_2 - \frac{m(m+1)(m+2)}{1 \cdot 2 \cdot 3}\,S_3$$
$$+ \frac{m(m+1)(m+2)(m+3)}{1 \cdot 2 \cdot 3 \cdot 4}\,S_4 \,.\,.\,.\,.\,.$$

Thus, upon taking three, or two, or one out of five lives as given in the tabular scheme,—

$$A_{\overset{3}{\overline{vwxyz}}} = S_0 - 3\,S_1 + 6\,S_2$$
$$A_{\overset{2}{\overline{vwxyz}}} = S_0 - 2\,S_1 + 3\,S_2 - 4\,S_3$$
$$A_{\overset{1}{\overline{vwxyz}}} = S_0 - \quad S_1 + \quad S_2 - \quad S_3 + S_4$$

By these formulas the scheme for lives may be indefinitely prolonged.

If all the n lives are of the same value as X, then the value of the annuity of £ 1 on the longest life will be,—

$$A_{\overline{xxx \text{ to } n}} = A_{\overline{x^n}} = n A_x - \frac{n(n-1)}{1 \cdot 2}\,A_{xx} + \frac{n(n-1)(n-2)}{1 \cdot 2 \cdot 3}\,A_{xxx}$$
$$- \frac{n(n-1)(n-2)(n-3)}{1 \cdot 2 \cdot 3 \cdot 4}\,A_{xxxx} \,.\,.\,.\,.\,.\,.\,.$$

SCHEME for finding EQUATIONS to express the PROBABILITIES OF LIVING and DYING among FIVE LIVES, VWXYZ, and the VALUES OF ANNUITIES dependent on them, in various combinations.

Section I.	ALIVE.	DEAD.			
(1) ALL ALIVE	VWXYZ	—	$vwxyz$	=	$vwxyz$
(2) 1 DEATH	WXYZ	V	$wxyz\ (1-v)$	=	$wxyz - vwxyz$
	VXYZ	W	$vxyz\ (1-w)$	=	$vxyz - vwxyz$
	VWYZ	X	$vwyz\ (1-x)$	=	$vwyz - vwxyz$
	VWXZ	Y	$vwxz\ (1-y)$	=	$vwxz - vwxyz$
	VWXY	Z	$vwxy\ (1-z)$	=	$vwxy - vwxyz$
(3) 2 DEATHS	XYZ	VW	$xyz\ (1-v)\ (1-w)$	=	$xyz - wxyz - vxyz + vwxyz$
	WYZ	VX	$wyz\ (1-v)\ (1-x)$	=	$wyz - wxyz - vwyz + vwxyz$
	WXZ	VY	$wxz\ (1-v)\ (1-y)$	=	$wxz - wxyz - vwxz + vwxyz$
	WXY	VZ	$wxy\ (1-v)\ (1-z)$	=	$wxy - wxyz - vwxy + vwxyz$
	VYZ	WX	$vyz\ (1-w)\ (1-x)$	=	$vyz - vxyz - vwyz + vwxyz$
	VXZ	WY	$vxz\ (1-w)\ (1-y)$	=	$vxz - vxyz - vwxz + vwxyz$
	VXY	WZ	$vxy\ (1-w)\ (1-z)$	=	$vxy - vxyz - vwxy + vwxyz$
	VWZ	XY	$vwz\ (1-x)\ (1-y)$	=	$vwz - vwyz - vwxz + vwxyz$
	VWY	XZ	$vwy\ (1-x)\ (1-z)$	=	$vwy - vwyz - vwxy + vwxyz$
	VWX	YZ	$vwx\ (1-y)\ (1-z)$	=	$vwx - vwxz - vwxy + vwxyz$
(4) 3 DEATHS	VW	XYZ	$vw\ (1-x)\ (1-y)\ (1-z)$	=	$vw - vwz - vwy - vwx + vwyz + vwxz + vwxy - vwxyz$
	VX	WYZ	$vx\ (1-w)\ (1-y)\ (1-z)$	=	$vx - vxz - vxy - vwx + vxyz + vwxz + vwxy - vwxyz$
	VY	WXZ	$vy\ (1-w)\ (1-x)\ (1-z)$	=	$vy - vyz - vxy - vwy + vxyz + vwyz + vwxy - vwxyz$
	VZ	WXY	$vz\ (1-w)\ (1-x)\ (1-y)$	=	$vz - vyz - vxz - vwz + vxyz + vwyz + vwxz - vwxyz$
	WX	VYZ	$wx\ (1-v)\ (1-y)\ (1-z)$	=	$wx - wxz - wxy - vwx + wxyz + vwxz + vwxy - vwxyz$
	WY	VXZ	$wy\ (1-v)\ (1-x)\ (1-z)$	=	$wy - wyz - wxy - vwy + wxyz + vwyz + vwxy - vwxyz$
	WZ	VXY	$wz\ (1-v)\ (1-x)\ (1-y)$	=	$wz - wyz - wxz - vwz + wxyz + vwyz + vwxz - vwxyz$
	XY	VWZ	$xy\ (1-v)\ (1-w)\ (1-z)$	=	$xy - xyz - wxy - vxy + wxyz + vxyz + vwxy - vwxyz$
	XZ	VWY	$xz\ (1-v)\ (1-w)\ (1-y)$	=	$xz - xyz - wxz - vxz + wxyz + vxyz + vwxz - vwxyz$
	YZ	VWX	$yz\ (1-v)\ (1-w)\ (1-x)$	=	$yz - xyz - wyz - vyz + wxyz + vxyz + vwyz - vwxyz$
(5) 4 DEATHS	V	WXYZ	$v\ (1-w)\ (1-x)\ (1-y)\ (1-z)$	=	$v - vw - vx - vy - vz + vyz + vxz + vxy + vwz + vwy + vwx - vxyz$ $- vwyz - vwxz - vwxy + vwxyz$
	W	VXYZ	$w\ (1-v)\ (1-x)\ (1-y)\ (1-z)$	=	$w - vw - wx - wy - wz + wyz + wxz + wxy + vwz + vwy + vwx - wxyz$ $- vwyz - vwxz - vwxy + vwxyz$
	X	VWYZ	$x\ (1-v)\ (1-w)\ (1-y)\ (1-z)$	=	$x - vx - wx - xy - xz + xyz + wxz + wxy + vxz + vxy + vwx - wxyz$ $- vxyz - vwxz - vwxy + vwxyz$
	Y	VWXZ	$y\ (1-v)\ (1-w)\ (1-x)\ (1-z)$	=	$y - vy - wy - xy - yz + xyz + wyz + wxy + vyz + vxy + vwy - wxyz$ $- vxyz - vwyz - vwxy + vwxyz$
	Z	VWXY	$z\ (1-v)\ (1-w)\ (1-x)\ (1-y)$	=	$z - vz - wz - xz - yz + xyz + wyz + wxz + vyz + vxz + vwz - wxyz$ $- vxyz - vwxz - vwyz + vwxyz$
(6) ALL 5 DEAD	-	VWXYZ	$(1-v)\ (1-w)\ (1-x)\ (1-y)\ (1-z)$	=	$1 - v - w - x - y - z + vw + vx + vy + vz + wx + wy + wz + xy + xz$ $+ yz - xyz - wyz - wxz - wxy - vyz - vxz - vxy - vwz - vwy$ $- vwx + wxyz + vxyz + vwyz + vwxz + vwxy - vwxyz$
(7) NOT ALL DEAD (that is, 1 at least alive)			$\{1 - (1-v)\ (1-w)\ (1-x)\ (1-y)\ (1-z)\}$	=	$v + w + x + y + z - vw - vx - vy - vz - wx - wy - wz - xy - xz$ $- yz + xyz + wyz + wxz + wxy + vyz + vxz + vxy + vwz + vwy$ $+ vwx - wxyz - vxyz - vwyz - vwxz - vwxy + vwxyz$

Let n be Total Lives; and μ the Deaths; m the Living: or $n = m + \mu$; and $n - \mu = m$. The suffixes are placed to p, but apply also to A, or a.

Section II.

$n - \mu$

(1) $\frac{5-0}{vwxyz}$ = All Alive $= p_{vwxyz}$

(2) $\frac{5-1}{vwxyz}$ = Only 4 alive and only 1 dead $= p_{wxyz} + p_{vxyz} + p_{vwyz} + p_{vwxz} + p_{vwxy} - 5\,p_{vwxyz}$

(3) $\frac{5-2}{vwxyz}$ = Only 3 alive and only 2 dead $= p_{xyz} + p_{wyz} + p_{wxz} + p_{wxy} + p_{vyz} + p_{vxz} + p_{vxy} + p_{vwz} + p_{vwy} + p_{vwx} - 4\,p_{wxyz} - 4\,p_{vxyz} - 4\,p_{vwyz} - 4\,p_{vwxz} - 4\,p_{vwxy} + 10\,p_{vwxyz}$

(4) $\frac{5-3}{vwxyz}$ = Only 2 alive and only 3 dead $= p_{vw} + p_{vx} + p_{vy} + p_{vz} + p_{wx} + p_{wy} + p_{wz} + p_{xy} + p_{xz} + p_{yz} - 3\,p_{xyz} - 3\,p_{wyz} - 3\,p_{wxz} - 3\,p_{wxy} - 3\,p_{vyz} - 3\,p_{vxz} - 3\,p_{vxy} - 3\,p_{vwz} - 3\,p_{vwy} - 3\,p_{vwx} + 6\,p_{wxyz} + 6\,p_{vxyz} + 6\,p_{vwyz} + 6\,p_{vwxz} + 6\,p_{vwxy} - 10\,p_{vwxyz}$

(5) $\frac{5-4}{vwxyz}$ = Only 1 alive and only 4 dead $= p_v + p_w + p_x + p_y + p_z - 2\,p_{vw} - 2\,p_{vx} - 2\,p_{vy} - 2\,p_{vz} - 2\,p_{wx} - 2\,p_{wy} - 2\,p_{wz} - 2\,p_{xy} - 2\,p_{xz} - 2\,p_{yz} + 3\,p_{xyz} + 3\,p_{wyz} + 3\,p_{wxz} + 3\,p_{wxy} + 3\,p_{vyz} + 3\,p_{vxz} + 3\,p_{vxy} + 3\,p_{vwz} + 3\,p_{vwy} + 3\,p_{vwx} - 4\,p_{wxyz} - 4\,p_{vxyz} - 4\,p_{vwyz} - 4\,p_{vwxz} - 4\,p_{vwxy} + 5\,p_{vwxyz}$

Section III.

m

(1) $\frac{5}{vwxyz}$ = All 5 alive ($= p_{vwxyz}$ as usually written) $= p_{vwxyz}$

(2) $\frac{4}{vwxyz}$ = 5 or 4 alive $= p_{wxyz} + p_{vxyz} + p_{vwyz} + p_{vwxz} + p_{vwxy} - 4\,p_{vwxyz}$

(3) $\frac{3}{vwxyz}$ = 5, 4, or 3 alive $= p_{xyz} + p_{wyz} + p_{wxz} + p_{wxy} + p_{vyz} + p_{vxz} + p_{vxy} + p_{vwz} + p_{vwy} + p_{vwx} - 3\,p_{wxyz} - 3\,p_{vxyz} - 3\,p_{vwyz} - 3\,p_{vwxz} - 3\,p_{vwxy} + 6\,p_{vwxyz}$

(4) $\frac{2}{vwxyz}$ = 5, 4, 3, or 2 alive $= p_{vw} + p_{vx} + p_{vy} + p_{vz} + p_{wx} + p_{wy} + p_{wz} + p_{xy} + p_{xz} + p_{yz} - 2\,p_{xyz} - 2\,p_{wyz} - 2\,p_{wxz} - 2\,p_{wxy} - 2\,p_{vyz} - 2\,p_{vxz} - 2\,p_{vxy} - 2\,p_{vwz} - 2\,p_{vwy} - 2\,p_{vwx} + 3\,p_{wxyz} + 3\,p_{vxyz} + 3\,p_{vwyz} + 3\,p_{vwxz} + 3\,p_{vwxy} - 4\,p_{vwxyz}$

(5) $\frac{1}{vwxyz}$ = 5, 4, 3, 2, or 1 alive ($= p_{\overline{vwxyz}}$ as usually written) $= p_v + p_w + p_x + p_y + p_z - p_{vw} - p_{vx} - p_{vy} - p_{vz} - p_{wx} - p_{wy} - p_{wz} - p_{xy} - p_{xz} - p_{yz} + p_{xyz} + p_{wyz} + p_{wxz} + p_{wxy} + p_{vyz} + p_{vxz} + p_{vxy} + p_{vwz} + p_{vwy} + p_{vwx} - p_{wxyz} - p_{vxyz} - p_{vwyz} - p_{vwxz} - p_{vwxy} + p_{vwxyz}$

(6) $\frac{0}{vwxyz}$ = All 5 dead $= 1 - p_v - p_w - p_x - p_y - p_z + p_{vw} + p_{vx} + p_{vy} + p_{vz} + p_{wx} + p_{wy} + p_{wz} + p_{xy} + p_{xz} + p_{yz} - p_{xyz} - p_{wyz} - p_{wxz} - p_{wxy} - p_{vyz} - p_{vxz} - p_{vxy} - p_{vwz} - p_{vwy} - p_{vwx} + p_{wxyz} + p_{vxyz} + p_{vwyz} + p_{vwxz} + p_{vwxy} - p_{vwxyz}$

Note.—It will be observed that for 5 lives there are $32 = 2^5$ cases; and if there are 6 lives there are $2^6 = 64$ cases; or generally 2^n cases for n lives. To obtain the suffixes for 4 lives strike out all the terms in which v occurs: to get the suffixes for 3 lives strike out the terms containing v or w; for suffixes of 2 lives strike out the terms containing v or w or x. To insert other lives proceed on the same plan as in the scheme. The scheme is divided into 3 sections. The first section contains 7 groups; thus in the second group the suffixes suffice to indicate the probability that WXYZ will all be alive at the end of a year and V be dead; it is $p_{wxyz} - p_{vwxyz}$; and the correlative Annuity is $A_{wxyz} - A_{vwxyz}$, the first payment of which is made on the death of V, and the Annuity ceases on the death of either WXYZ. By adding together the terms of this group (2) the second line of Section II. is obtained; and the suffixes for the probabilities that some 4 will be alive and some one of the five be dead, are found: the same suffixes give the value of an Annuity to commence at the end of the year of the first and to terminate at the second death. Thus in Section II. the third line has the sum of the terms of group 3 in Section I., the fourth line has the sum of the terms of group 4 in Section I., and the fifth line has the sum of the terms of group 5 in the same Section I. In Section III. the line 2 = sum of terms (1) + (2) in Section II.; line 3 = sum of (1) + (2) + (3) in Section II.; line 4 = sum of (1) + (2) + (3) + (4) in Section II.; line 5 = sum of (1) + (2) + (3) + (4) + (5) in Section II.; and line 6 = line 6 in Section I., or the terms of line 5 in Section III. subtracted from unity.

The value of the reversion of an Annuity certain for n years, or a perpetuity of £1 after the extinction of all the lives, is found by the last line, on substituting V_x or $\frac{1+i}{i}$ for the first term 1, and inserting the values of the Life Annuities indicated by the suffixes.

Reversionary and Survivorship Annuities on any Number of Lives.

Let an annuity of £ 1 a year for ever be called a perpetuity of £ 1, then its value is $\frac{1+i}{i}$, if i by hypothesis be the true rate of interest; now A_x is the value of £ 1 a year payable during the life of X in possession, the reversion is the difference between these two values: thus $A_{i|x} = \frac{1+i}{i} - A_x =$ the value of every £ 1 of the perpetuity to be received after the death of X.

£ 1 to be received at the end of the year of X's death is called a reversionary sum, and its value is, as we know, $\Pi_x = \left(\frac{1+i-iA_x}{1+i}\right)$. Now make the annuity i instead of £ 1, or equal the interest of the reversionary sum; and $A_{i|x} = \left(\frac{1+i}{i} - A_x\right) i = (1+i-iA_x) =$ the value of the reversionary annuity of £ i $=$ the value of the reversionary sum (£ 1) of which i is the interest + one year's interest $= 1 + i$; and $(1+i)\,\Pi_x = \frac{1+i-iA_x}{1+i} \times 1 + i$. Thus at 5 per cent. interest the reversionary annuity on X of £ 5 is of the same value as the reversionary sum of £ 105 payable at the end of the year of his death.

The reversionary perpetuity is obtained by this general formula, $A_{i|\overset{m}{\overline{a\ldots z}}} = \frac{1+i}{i} - A_{\overset{m}{\overline{a\ldots z}}}$, in which the lives are any number n; and m varies from n to 1.

Where the annuity certain is for a term of years n exceeding the years that the oldest life will attain, $V_n - A_{\overset{m}{\overline{a\ldots z}}}$; but if this is not the case the life annuity for n years must be substituted for the annuity for the full term of the tabular life. Thus $V_n - \frac{N_{x|n}}{D_x}$ is the value of a reversion of the kind.

The reversion of the annuity at constant risk is dealt with in the same way as the annuity certain; thus if the risk is $\frac{q}{1+p+q}$, then $\frac{1}{p+q} + 1 = \frac{1}{i} + 1$ is the value of the perpetuity of £ 1; and the reversionary annuity takes the form $\frac{1+i}{i} - A_{\overset{m}{\overline{x\ldots z}}}$ as before. A life annuity or life interest in land, well secured, it will be found is worth more than an annuity at risk for an infinite term. Thus if $p = {\cdot}03$, and the constant risk is $\frac{{\cdot}02}{1{\cdot}05}$, the perpetuity of £ 1 is worth, with the first instalment due, 21 years' purchase; at risk $= \frac{{\cdot}07}{1{\cdot}10}$ and profit-rate ·03, 11 years' purchase; but a life annuity by English Male Table A_{10} is worth 24·1071 years' purchase, taking the interest at 3 per cent.

Survivorship annuities on three, four, or more lives are divided among the lives in different proportions during their co-existence; and special formulas are required to meet the innumerable cases.

The value of X's share in an annuity of £1 on the longest of n lives, to be divided equally among the living at each period of payment, is:—

$$G_{x(n)} = G_1 - \frac{1}{2} G_2 + \frac{1}{3} G_3 - \frac{1}{4} G_4 \ldots \pm \frac{1}{n} G_n$$

Here $G_1 = A_x$; $G_2 =$ the value of a joint annuity of £1 on X and on each of the other lives; $G_3 =$ the value of a joint annuity on X in every possible combination of three given lives, of which X is one . . . ; and G_n the value of a joint annuity of £1 on the n lives. The sign is $-$ when n is an even number, and $+$ when it is odd.

Thus $G_x \quad = A_x$

$$G_{(x)(y)} = A_x - \frac{1}{2} A_{xy}$$

$$G_{x(yz)} = A_x - \frac{1}{2} (A_{xy} + A_{xz}) + \frac{1}{3} \cdot A_{xyz}$$

$$G_{x(yzw)} = A_x - \frac{1}{2} (A_{xy} + A_{xz} + A_{xw}) + \frac{1}{3} (A_{xyz} + A_{xzw} + A_{xyw}) - \frac{1}{4} A_{xyzw}.$$

Thus if there are three lives, and if an annuity of £1,200 be divided amongst them in this way, and if X be the longest life, he will get £400 whilst Y and Z live; £600 after the death of Y or Z; and £1,200 after the death of both X and Y. But X may die first or second; and the value of the share of Y is found by the same equation, when the x and y are reciprocally exchanged. So of Z. The sum of all the values is the value of the annuity on the longest life ($= A_{\overline{xyz}}$).

Temporary or deferred annuities are treated by the same method, and their values may be inserted in the general formula.

If the annuity descends in order to the three designated lives in succession, the value of X's share is A_x; of Y's share is $A_y - A_{xy}$; of Z's share is $A_z - A_{zx} - A_{zy} + A_{zyx}$.

The sum of the shares of the three is also $= A_{\overline{xyz}}$; for it is an annuity on the longest of the three lives. But in this case X enjoys the annuity—say £1,200 during his lifetime—and at the death of X, if Y be alive, £1,200 a year is enjoyed by Y for life; and at the death of Y it goes to Z, if Z is then alive, who enjoys £1,200 a year for the residue of life. If Y die before Z, the annuity from X goes direct to Z at the death of X, if Z be then alive; otherwise it lapses at the death of X, who outlives the reversioners.

The following case is given by the writers, who supply a considerable variety:—

X, Y, and Z purchase an annuity on the longest life: X and Y (say father and mother) are to enjoy it equally during their joint lives: if X die first, then Y and Z (mother and son) share it equally during their joint lifetime; and the survivor takes the whole: if Y die first, then X has the whole for life, and the right to it at X's death devolves on Z.

$$\text{Value of the share of X} = \frac{A_{xy}}{2} + (A_x - A_{xy})$$
$$= A_x - \frac{A_{xy}}{2}$$

$$\text{Value of the share of Y} = \frac{A_{xy}}{2} + \frac{A_{yz} - A_{xyz}}{2}$$
$$+ A_y - A_{xy} - A_{zy} + A_{xyz}$$
$$= A_y - \frac{A_{xy}}{2} - \frac{A_{zy}}{2} + \frac{A_{xyz}}{2}$$

$$\text{Value of the share of Z} = \frac{A_{yz} - A_{xyz}}{2}$$
$$+ A_z - A_{zx} - A_{zy} + A_{xyz}$$
$$= A_z - A_{xz} - \frac{A_{yz}}{2} + \frac{A_{xyz}}{2}$$

By inspecting the suffix scheme it is easy to pick out the suffixes for the annuities which express the various values to which any particular life or combination of lives has a right, whether to the whole or to a fractional part, and thus to construct the formulas.

Thus $A_{\overline{xyz}} - A_{xyz}$ = the value of the remainder of an annuity on the longest life after the first death $= A_x + A_y + A_z - A_{xy} - A_{xz} - A_{yz}$.

The value of the same annuity after the second death (*see* scheme) is—
$A_{\overline{xyz}} - (A_{xy} + A_{xz} + A_{yz} - 2\,A_{xyz})$.

And $A_{\overset{2}{\overline{xyz}}} - A_{xyz} = A_{xy} + A_{xz} + A_{yz} - 3\,A_{xyz}$ = the value of the joint annuity on the two longest lives after the first death of the third.

Insurances on Four or more Lives.

$\Pi_{\overset{m}{\overline{uvwxyz}}\ldots} = 1 - dA_{\overset{m}{\overline{uvwxyz\ldots\ldots}}}$ is the general formula for the value of £1 payable at the end of the death-year of the 1st, 2nd, ... m^{th} . . . . up to the n^{th} or last life. Thus—

$$\text{As } \Pi_{\overline{xy}} = \Pi_x + \Pi_y - \Pi_{xy} = \Pi_x + \Pi_y + dA_{xy} - 1$$
$$\text{So } \Pi_{xyz} = 1 - dA_{xyz};$$
$$\text{And } \Pi_{\overline{xyz}} = 1 - dA_{\overline{xyz}} = 1 - d\,(A_x + A_y + A_z - A_{xy} - A_{xz} - A_{yz}$$
$$+ A_{xyz})$$
$$= \Pi_x + \Pi_y + \Pi_z - \Pi_{xy} - \Pi_{xz} - \Pi_{yz} + \Pi_{xyz}$$

= the value of £1, payable at the end of the death-year of the longest life of the three.

$$= \Pi_x + \Pi_y + \Pi_z + \Pi_{xyz} + dA_{xy} + dA_{xz} + dA_{yz} - 3$$

For more lives apply to the scheme for suffixes, as it is applicable to this kind of expression, which follows the same law as that for annuities: thus by making S_0 the value of an insurance on the combinations of m lives, and S_1 the value of the insurance on $m+1$ lives, and so on, we get the general formula:—

$$\Pi_{\overset{m}{\overline{uvwxyz\ldots}}} = S_0 - mS_1 + \frac{m(m+1)}{1\cdot 2}S_2 - \frac{m\cdot m+1\cdot m+2}{1\cdot 2\cdot 3}S_3\ldots\ldots$$

= the value of £1, payable at the end of the age-year of the m^{th} death.

$$\text{As } \pi_{xyz} = \frac{1}{A_{xyz}} - d = a_{xyz} - d;$$

$$\text{And } \pi_{\overline{xyz}} = \frac{1}{A_{\overline{xyz}}} - d = a_{\overline{xyz}} - d;$$

$$\text{So } \pi_{\overset{m}{\overline{uvwxyz\ldots}}} = \frac{1}{A_{\overset{m}{\overline{uvwxyz\ldots}}}} - d = a_{\overset{m}{\overline{uvwxyz\ldots}}} - d$$

= the annual premium to be paid so long as m out of n lives survive to insure £1 at the m^{th} death.

The value of an annuity certain for a given term—n years—after the extinction of any life or lives, is found by the equation:—

$$(1)\ \Pi_x\, V_{n-1} = \left(1 - \frac{i}{1+i}A_x\right) \times \frac{1+i}{i}(1 - v^x)$$

$$= (1 + i - iA_x)\frac{(1-v^x)}{i}$$

$$= \left(\frac{1+i}{i} - A_x\right)(1 - v^x)$$

(2) The general equation is $\Pi_{\overset{m}{\overline{xyz\ldots\ldots}}}\,.\,V_{n-1}$.

The value of an annuity of £1 on the life of X, and of an annuity certain of £1 for n years after his death—first payment at the end of his death-year—is $A_x + \Pi_x\,.\,V_{n-1}$.

(3) The value of an annuity of £1 certain for the term of n years—first payment due; and afterwards for the remainder of any given life or lives, is,—

$$\text{Life of X;}\qquad V_{n-1} + \frac{N_{x+n}}{D_x} = V_{n-1} + A_{x|n}.$$

(4) When the deferred annuity is on three lives, X, Y, and Z, the general equation becomes

$$V_{n-1} + A_{\overset{m}{\overline{xyz}}|n};$$

it is enjoyed certainly for the $n-1$ years, or for n payments; and fails afterwards on the death of the 1st, 2nd, or 3rd life of the three; and if $m = 3$ it ceases at the first; if $= 2$ at the second; if $= 1$ at the third.

JOINT AFTERLIFETIME (EXPECTATION) OF ANY NUMBER OF LIVES.

It may be assumed that $l_x l_y$ pairs of the lives X male and Y female, on becoming $l_{x+1} \cdot l_{y+1}$ pairs in a year, experience during that year $l_{x+\frac{1}{2}} \cdot l_{y+\frac{1}{2}} = P_{xy}$ years of joint lifetime; and so in the next year $P_{(xy)+1}$, and $P_{xy+2} \ldots$, passing through successive years of age, experience so many years of life, until the termination of the series by one of the factors falling to $l_\omega = 0$. Then, putting

$$Q_{xy} = P_{(xy)} + P_{(xy)+1} + P_{(xy)+2} \ldots + P_\omega.$$

And $E_{xy} = \frac{Q_{xy}}{l_{xy}}$ = the joint afterlifetime of two lives respectively aged x and y.

The same method is applicable to three or to any number of joint lives, male or female: thus, $E_{xyz} = \frac{Q_{xyz}}{l_{xyz}}$.

The logarithms of $l_{x+\frac{1}{2}}$ and $l_{y+\frac{1}{2}}$ will be found at pages 130–133 under the number in the age column $4x + 2$ and $4y + 2$ of the Male and Female Table: thus, $\lambda\, l_{20\frac{1}{2}}$ is $\lambda\, l_{82}$ in those Tables.

$E_{\overline{xy}} = E_x + E_y - E_{xy}$ = the mean afterlifetime of the longest life of two.

$E_{\overline{xyz}} = E_x + E_y + E_z - (E_{xy} + E_{xz} + E_{yz}) + E_{xyz}.$

The suffixes are the same as those for annuities. *See* scheme.

To find approximations to the mean afterlifetime—of combined lives—from the afterlifetime of the single lives:

By making $2\,E_x = 2\,x$ = the complement of life of X; $2\,E_y = 2\,y$ = the complement of the life Y—and so on to any extent—the joint afterlifetime is found by Demoivre's hypothesis from the following equations:—

AFTERLIFETIME or Expectation of the longest life of *five* lives, of which the several afterlifetimes are $v > w > x > y > z$.

$$E_{\overline{vwxyz}} = \frac{v^1}{1} + \frac{w^2}{3 \cdot v} + \frac{x^3}{6 \cdot vw} + \frac{y^4}{10 \cdot vwx} + \frac{z^5}{15 \cdot vwxy}$$

AFTERLIFETIME of the shortest life of five, of which the several afterlifetimes are $z < y < x < w < v$. This is the afterlifetime of the joint lives.

$$E_{zyxwv} = \frac{z}{1} - \left(\frac{1}{v} + \frac{1}{w} + \frac{1}{x} + \frac{1}{y}\right)\frac{z^2}{3} + \left(\frac{1}{vw} + \frac{1}{vx} + \frac{1}{vy} + \frac{1}{wx} + \frac{1}{wy} + \frac{1}{xy}\right)\frac{z^3}{6}$$
$$- \left(\frac{1}{vwx} + \frac{1}{vwy} + \frac{1}{vxy} + \frac{1}{wxy}\right)\frac{z^4}{10} + \frac{z^5}{15\,vwxy}$$

[*Note.*—The numerical part of the co-efficient of the n^{th} term in each series is $\frac{2}{n \cdot n+1}$; and it is readily formed by adding the exponent = n to the number in the denominator of the preceding co-efficient: thus $\frac{1}{10}$ occurs in the *fourth*, and $\frac{1}{10+5} = \frac{1}{15}$ in the *fifth* term, of which the exponent is 5. The successive co-efficients are readily inserted for any number of lives.]

By taking lives of the same mean afterlifetime $= x$, the equations become for n lives $x - \frac{n-1}{n+1}x = \frac{2x}{n+1}$ = afterlifetime of the shortest of n lives; and $x + \frac{n-1}{n+1}x = \frac{2nx}{n+1}$ = afterlifetime of the longest life: the x being the mean of the two expressions.

Thus the afterlifetime of n lives having each the expectation x is shown to be as follows:—

LIVES.	AFTERLIFETIME.	
n	Shortest Life.	Longest Life.
2	$x - \frac{1}{3}x$	$x + \frac{1}{3}x$
3	$x - \frac{2}{4}x$	$x + \frac{2}{4}x$
4	$x - \frac{3}{5}x$	$x + \frac{3}{5}x$
5	$x - \frac{4}{6}x$	$x + \frac{4}{6}x$
6	$x - \frac{5}{7}x$	$x + \frac{5}{7}x$
n	$x - \frac{n-1}{n+1}x$	$x + \frac{n-1}{n+1}x$
∞	$x - x = 0$	$x + x = 2x$

[*Note.*—It is evident that, by hypothesis, the longest of an infinite number of lives cannot exceed $2x$, which is the extreme term of lifetime, as is implied by the term *complement of life.* Upon the other hand, out of an infinite number of lives, be the mortality-rate what it may, one will be extinguished every instant, and that extinction puts an end to the joint life, so the joint afterlifetime becomes $= 0$. If $x = 30$, then, in the case of 2 lives, the joint afterlifetime is 20, and the longest afterlifetime is 40: in three lives the shortest life lasts 15, the second 30, and the third 45: for 5 lives the lifetimes run thus, 10, 20, 30, 40, 50; by taking 99 lives the longest afterlifetime approaches the limit of lifetime; it is $1{\cdot}98 \times x$, or if x is 40 it is 79·2. Thus of 99 persons aged 20 with the expectation $x = 40$, upon this hypothesis, 1 will live to the age of 99·2; and it shows, in accordance with observation, how probable it is in small communities that one life will approach the natural limit.]

If we take 2 lives v having the longest afterlifetime and w the shortest, the expressions for the longest and shortest life are by hypothesis $E_{\overline{vw}} = v + \frac{w^2}{3v}$; and $E_{wv} = w - \frac{w^2}{3v}$; while the mean of the two is $\frac{E_{\overline{vw}} + E_{vw}}{2} = \frac{v+w}{2}$. When $w = v$ the function $E_{\overline{vw}}$ is at a maximum; and as w diminishes it declines, becoming a minimum when $w = 0$, the second life, W, here producing no effect on the afterlifetime, which depends entirely on the first. The ordinary expression for the afterlifetime, as has been shown, is $E_{\overline{xy}} = E_x + E_y - E_{xy}$; and by any Table $\frac{E_{\overline{xy}} + E_{xy}}{2} = \frac{E_x + E_y}{2}$.

When a life V, of which the mean afterlifetime is v, is combined with two other lives W and X, the afterlifetime of the longest of the three lives is while $v > w > x$; $E_{\overline{vwx}} = v + \frac{w}{3v} + \frac{x^3}{6vw}$. This function approaches a maximum as w and x approach v. The $E_{\overline{vwx}}$ becomes $E_{\overline{vvv}} = v + \frac{v^2}{3v} + \frac{v^3}{6v^2} = v + \frac{1}{3}v + \frac{1}{6}v = \frac{3}{2}v$.

This agrees with what has already been said; for the sum of the series $\frac{2}{1\cdot 2} + \frac{2}{2\cdot 3} + \frac{2}{3\cdot 4} + \frac{2}{4\cdot 5} \ldots$ *ad infinitum*, is 2; and when of an infinite number of lives all are equal to v in value, then $2v$ is the afterlifetime of the longest; while lesser values of w, x, y, and $z \ldots$ may reduce the longest afterlifetime to any extent between $2v$ and v. As the single afterlifetime varies so does the joint lifetime vary, the one being a function of the other.

If $z < y < x$ be the lifetime of three lives, then $E_{zyx} = z - \left(\frac{1}{y} + \frac{1}{x}\right)\frac{z^2}{3} + \frac{1}{xy} \cdot \frac{z^3}{6}$.

In all cases the function has a value less than z, and it declines in value as x and y fall to z.

It is proposed to publish in a supplementary volume Tables of some Joint Expectations; in the meantime, if these general equations do not give close approximations, they indicate the general laws applicable to all cases.

To get preliminary approximations to the joint afterlifetime of X and Y from the Two-Life Annuity Tables:

Find a value A_{x+n} in the Single-Life Table $= A_{xy}$; the E_{x+n} = approximate value of E_{xy}.

DURATION AND VALUE OF THINGS AT CONSTANT RISK, OR AT RISKS PARTLY CONSTANT AND PARTLY VARIABLE.

Let c be constant, and express invariably the probability that l things will survive a year; and c^n = the probability of surviving n years; k = modulus of common logarithm; $\frac{1}{c^n} = r^n$; $1 - c = f$; and p = the annual rate of profit.

$E'_n = \frac{-k}{\lambda c}(1 - c^n) = \frac{k}{\lambda r}(1 - c^n)$ = the mean years of existence to be enjoyed within the n years.

$E_\infty = E = \frac{k}{\lambda r}$ = the mean existence of the things when n is infinite: this corresponds with the mean afterlifetime of the Life Table.

$T = \frac{-\lambda \frac{1}{2}}{\lambda c} = \frac{\lambda 2}{\lambda r}$ = probable existence of the things: this corresponds with the probable lifetime.

Let $\frac{E}{2} = \frac{k}{\lambda r}(1 - c^n)$; then $c^n = \frac{1}{2}$. $\therefore n = \frac{\lambda 2}{\lambda r}$ = the time within which half the mean existence will be enjoyed. $\therefore n = T$.

$\therefore$ In the years of probable existence (T) half the mean existence $\left(\frac{E}{2}\right)$ will be enjoyed: upon Demoivre's hypothesis $E = T$; and in T years $\frac{3}{4}E$ $(= \cdot 75\,E)$ is enjoyed. By the English Table in T years $\cdot 71\,E_0 = E_{0t} = \frac{Q_{0|t}}{l_0}$, is enjoyed by males.

$\frac{E}{T} = \frac{k}{\lambda r} \cdot \frac{\lambda r}{\lambda 2} = \frac{k}{\lambda 2} = \frac{\cdot 4342945}{\cdot 3010300} = 1\cdot 443$ (having its $\lambda = 0\cdot 1591745$) = ratio of probable to mean existence; this value being independent of c.

$E = \frac{k}{\lambda 2} \cdot T$; $T = \frac{\lambda 2}{k} \cdot E$.

Compound constant risks to any extent which are represented by the fractions $c_1, c_2, \ldots\ldots c_n$, can always be reduced to the form $c = (c_1 c_2 \ldots\ldots c_n)$, and thus be inserted in the above equations.

They may also be separately represented: thus $E_{c_1 c_2} = \dfrac{-k}{\lambda (c_1 c_2)}$;

and $E_{c_1 c_2 c_3 \cdot x} = \dfrac{-k}{\lambda (c_1 c_2 c_3)} \left\{ 1 - (c_1 c_2 c_3)^x \right\}$ = the mean joint existence over x years of three things, of which the probability of existing a year is represented by c_1, c_2, and c_3, respectively. When $x = \infty$ the general equation for joint existence becomes respectively,—

$$E_{(c_1 c_2 \ldots\ldots c_n)} = \frac{-k}{\lambda (c_1 c_2 \ldots c_n)}$$

Put $v = \dfrac{1}{1 + p}$ as a term in the equation and the value of a perpetuity payable continuously at compound risk is obtained.

When the risks are equal and invariable the mean joint existence of 2, 3 . . . n things becomes—

$$\frac{-k}{\lambda c^2} = \frac{-k}{2 \lambda c};\ \frac{-k}{3 \lambda c};\ \frac{-k}{4 \lambda c};\ \text{and } \frac{-k}{n \lambda c} \text{ for } n \text{ things.}$$

So the joint mean existence of two things each at equal risk is $\frac{1}{2}$ of the mean existence of one at that risk; and universally $\dfrac{E_x}{n} = \dfrac{-k}{n \lambda c}$ = the mean joint existence of n things which may be represented by E_{x^n}.

The probability that of two existences X and Y subject to invariable risks the longest will continue a year is—

$$= 1 - (1 - c_1)(1 - c_2) = c_1 + c_2 - c_1 c_2,$$

and the mean after-existence of the last of X and Y is—

$$E_{\overline{xy}} = -k \Big(\frac{1}{\lambda c_1} + \frac{1}{\lambda c_2} - \frac{1}{\lambda (c_1 c_2)} = E_x + E_y - E_{xy},$$

and the annuity assumes the same form.

When the risks on n things are all equal (c) then the mean after-existence of those existing the last out of n things is—

$$E_{x^n} = \frac{-k}{\lambda c} \left\{ \frac{n}{1} - \frac{n(n-1)}{1 \cdot 2} \cdot \frac{1}{2} + \frac{n(n-1)(n-2)}{1 \cdot 2 \cdot 3} \cdot \frac{1}{3} \cdots\cdots\cdots \pm \cdot \frac{1}{n} \right\} = \frac{-k}{\lambda c} \cdot b.$$

Thus if an indefinite number of groups of n lives X were subject to the invariable annual risk $(1 - c)$, the mean existence of the last liver of each group would be as above.

The value of b is readily obtained from the binomial co-efficients by dividing the terms by 1, 2, 3, ... n, in succession.

$$A_{x^n} = -k \left\{ \frac{n}{1} \cdot \frac{1}{\lambda (cv)} - \frac{n(n-1)}{1 \cdot 2} \cdot \frac{1}{\lambda (c^2 v)} + \frac{n(n-1)(n-2)}{1 \cdot 2 \cdot 3} \cdot \frac{1}{\lambda (c^3 v)} \cdots\cdots \pm \frac{1}{\lambda (c^n v)} \right\}$$

= value of annuity of £1 payable during the longest existence of n things.

$\mathrm{A}_n = \dfrac{1-(cv)^n}{1-cv}$ = value of annuity of £ 1 during existence payable n times (if X be subsisting at beginning of every n^{th} year);

$\mathrm{A}_\infty = \mathrm{A} = \dfrac{1}{1-cv} = \dfrac{1+p}{p+f}$ = value of the perpetuity subject to the risk f.

$\Pi_n = vf\mathrm{A}_n = \dfrac{f}{p+f} \times (1-(vc)^n)$

and $\Pi_\infty = \Pi = \dfrac{f}{p+f} = \dfrac{1-c}{1+p-c}$ = the present value of £ 1 payable at the end of the year in which existence ceases.

$\pi = \pi_n = \pi_\infty = vf = \dfrac{\Pi}{\mathrm{A}} = \dfrac{f}{p+f} \times \dfrac{p+f}{1+p} = \dfrac{f}{1+p}$ = annual premium to insure £ 1 payable at end of year of failure in n or in any number of years. The risk is constant, and no accumulation is required.

$\pi\mathrm{A} = \Pi = vf\mathrm{A} = \dfrac{f}{1+p} \cdot \dfrac{1+p}{p+f} = \dfrac{f}{p+f}$ = the annual premium to insure an annuity of £ 1 at risk f.

At risk ·01 and interest certain ·03, the annual premium to insure an annuity of £ 100 is $\dfrac{\cdot 01}{\cdot 04} \times 100 =$ £ 25. £ 100 a year in perpetuity at no risk, interest 3 per cent., is worth $33\frac{1}{3}$ years' purchase, or £ $3333 \cdot 33\dot{3}$. The single premium is $\Pi \times \dfrac{1}{p} \times 100 = \dfrac{f}{p+f} \cdot \dfrac{1}{p} \times 100 =$ £ $833 \cdot 33\dot{3}$; thus clearing the property of all risk and leaving £ 2,500 of net value.

Putting $\dfrac{v^x c^x l_x + v^{x+1} c^{x+1} l_{x+1} \ldots\ldots\ldots}{v^x c^x l_x} = \dfrac{\mathrm{D}'_x + \mathrm{D}'_{x+2}}{\mathrm{D}'_x} \ldots\ldots = \mathrm{A}'_x$

$= \dfrac{\mathrm{N}'_x}{\mathrm{D}'_x}$ = the present value of a life annuity of £ 1, when the annual profit on £ 1 is p, and $v = \dfrac{1}{1+p}$; and f being the risk-rate of failure from some cause independent of death $c = 1 - f$ the chance of not failing.

But if $c^x = \left(\dfrac{1+p}{1+i}\right)^x$ we shall have $v^x c^x = \dfrac{1}{(1+p)^x} \times \dfrac{(1+p)^x}{(1+i)^x} = \dfrac{1}{(1+i)^x} = v_1^{\,x}$ and the A_x for interest at rate i will give the value of the annuity.

$\Pi'_x = 1 - d\mathrm{A}'_x$ = single premium to insure £ 1 payable at the end of the death year, or the year of failure to the extent of £ 1, of which the annual risk remains constantly $= f$.

$d = \dfrac{p}{1+p}$ when p is the interest of money at no risk.

The life annuity value is taken from the Life Table in which interest (i) is $3\frac{1}{2}$ when the risk-rate is ·005, and the rate of interest at no risk (p) is $\cdot 03$; or when $i = \cdot 035 = \cdot 03 + \cdot 005$. And the same rule applies in other cases.

$\pi'_x = a'_x - d =$ the annual premium to insure £ 1 on the above contingency. Thus, when the interest of £ 1 of money at no risk is p; and when the risk-rate is f, take the value of the annuity from the Life Table at the interest-rate $i = p + f$; the $\frac{p}{1+p} = d$ corresponding invariably to the rate of interest assumed when there is no risk: for example, this being 3 per cent., $d = \frac{3}{103}$; and if the risk is $f = \cdot 02$, the A'_x is taken from the 5 per cent. Table. If the risk is not represented in the Tables, the series $c^x v^x l_x = D'_x$ has to be calculated.

Example :—X aged 30 insures £1000 payable at the end of his death year, or of the year of his forfeiture of a bond of the same value (£1000) by an act of which the annual risk of commission is $f = \cdot 005$, or 1 to 199: the rate of interest certain being 3 per cent.; what single premium, and also what annual premium, should he pay, allowing nothing for office profit or expenses?

$\lambda\, A'_{30} = 1 \cdot 2709050$
$\lambda\, d \;\; = \bar{2} \cdot 4642840$

$\bar{1} \cdot 7351890$; gives $\cdot 54349$; and $1 - \cdot 54349 = \overset{£}{\cdot 45651}$; or $\overset{£}{456 \cdot 51} = \Pi'_{30}$ to insure £1000.

$a_{30} = \cdot 05359$
$d \;\; = \cdot 02913$

$\cdot 02446$ or $\overset{£}{24 \cdot 46} = \pi_{30}$ to insure £1000.

Premiums to insure £100 at Death, *or at failure.*
Males :—Age 30.

Rate of Interest certain $= p = \cdot 03$.

In addition to risk of dying, the constant risk-rate (f)	Single Premium Π'_x	Annual Premium π'_x
	£	£
·0000	*41·706*	*2·084*
·0025	43·739	2·264
·0050	45·651	2·446
·0075	47·452	2·630
·0100	49·150	2·815
·0200	55·050	3·567

SUCCESSIVE ANNUITIES.

The value of an annuity of £1 on the life of X, age x, and a successor Y, is thus found, if it is assumed that the successor Y is of the age y, and receives the first £1 at the end of the death-year of X:—

$\Pi_x A_y = (1 - dA_x) A_y = A_y - dA_x \,.\, A_y$;

And $A_x + A_y - dA_x \,.\, A_y$ is the value of the two annuities; then

$\Pi_x \,.\, \Pi_y A_z = (1 - dA_x)(1 - dA_y) A_z =$ the value of the annuity on the third life Z, to be nominated at age z after the death of Y.

For A_x Mr. Davies substitutes A', which in his notation is an annuity first payment at age $x + 1$, and continued proportionally up to the day of X's death; for A_x he puts B', and gives $(1 - iA') B'$ as the value of the second annuity.

[*See* also on this Professor De Morgan and Mr. Peter Gray.]

ANNUITIES PAYABLE BY INSTALMENTS.

Interest convertible into Principal yearly.

The annuity of £1 is payable on a life X by m equal instalments of $\frac{£1}{m}$ at the beginning of every $\frac{1}{m}$ part of the year, and is to be continued rateably up to the moment of death.*

Approximated values are found by the following formulas. Put ${}_mA_x =$ an annuity so payable,

$${}_mA_x = A_x - \frac{m-1}{2m} + \frac{\Pi_x}{2m}$$

$m = 1$; yearly instalment ${}_1A_x = A_x + \frac{\Pi_x}{2}$

$m = 2$; half-yearly instalment ${}_2A_x = A_x - {\cdot}250 + \frac{\Pi_x}{4}$

$m = 4$; quarterly instalment ${}_4A_x = A_x - {\cdot}375 + \frac{\Pi_x}{8}$

$m = \infty$; momently instalment ${}_\infty A_x = A_x - {\cdot}500$

By striking out the terms with Π_x the value is that of an annuity which is paid for the last time at the beginning of that $\frac{1}{m}$ part of the year in which the life expires.

Upon the hypothesis that the joint lives broken up in any year of age are equally distributed over the year, as in the case of the single life, the same corrections apply to A_{xy} as to A_x; but if the annuity is to be continued to the moment of the first death Π_{xy} must be substituted for Π_x, and $\Pi_{\overline{xy}}$ for Π_x when the annuity is on the longest life. Thus,

$$A_{\overline{xy}} = A_x + A_y - A_{xy} + \frac{\Pi_{\overline{xy}}}{2}$$

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* Davies on Life Annuities, &c., pp. 311–347.

In the case of a reversionary annuity payable yearly, but also payable rateably for the part of the year, dating from the death of X, and also until the date of the death of Y, the approximated value, when the annuity is paid by yearly instalments, is $A_{x|y} = A_x - A_{xy} + \frac{\Pi_{\overset{1}{xy}} + \Pi_{\overset{2}{xy}}}{2}$: and upon the above supposition of instalments the general correction is $_mA_{x|y} = A_x - A_{xy} + \frac{\Pi_{\overset{1}{xy}} + \Pi_{\overset{2}{xy}}}{2\,m}$.

The more correct form of the equations, when m is made to vary from 1 to 2, 4 and infinity, is thus deduced by Mr. Davies for a single life, when the rate of interest is i and the annuity ceases at the last instalment before death :—

$$_2A_x = A_x - \cdot 50 + \frac{1}{4 + 2\,i}$$

$$_4A_x = A_x - \cdot 75 + \frac{3}{4\,(4 + i)} + \frac{2}{4\,(4 + 2\,i)} + \frac{1}{4\,(4 + 3\,i)}$$

$$_\infty A_x = A + \frac{\frac{r}{k}(\lambda r) - i}{i^2}.$$

[*Note.*—For $\frac{\lambda r}{k}$ the Napierian logarithm of r may be substituted.]

At 3 per cent. these corrections become for annuities by half-yearly, quarterly, and momently instalments, ·2463 and ·3704 and ·4951 ; and at 5 per cent. ·2439, ·3674, ·4919.*

Upon the hypothesis that the individuals in the combination of two lives, and not the combinations, are subject to equal decrements in the year of extinction, the equations become elaborate, but the results are nearly the same, and neither is exactly true. Thus instead of ·2463 we get ·2453* for the half-yearly correction, the preceding approximate correction being ·2500. Instead of ·3704, as above, the quarterly correction becomes ·3689, while the approximate correction is ·3750.

Interest convertible into Principal at the same Time as the Annuity is payable.

For 3 per cent. interest the new Tables for the first time give the values of annuities payable half-yearly and quarterly, and thus supply the means of precise determination. Mr. Davies's annuity, in which $\frac{1}{\left(1 + \frac{i}{m}\right)^m}$ is substituted for $v = \frac{1}{1 + i}$ to form the series $D_x = v^x\,l_x$, is readily found in the cases $\frac{1}{(1 + \frac{i}{2})^2}$ and $\frac{1}{(1 + \frac{i}{4})^4}$ by picking out every second or every fourth term from the half-yearly and quarterly Life Tables.

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* Davies, " Observations on Life Assurances," p. 317 and p. 327.

LIFE ANNUITIES AND PREMIUMS IN CONTINUOUS PAYMENTS, AND VALUES OF SUMS PAYABLE AT DEATH.

In the Appendix to the Registrar General's Twelfth Annual Report (pp. 38–54) I have given at length the investigations from which the following formulas are deduced.

To facilitate these calculations the Tables 4. and 5. (pp. cxlix–cl) will be found useful; their construction is shown in the annexed equations:—

$$
\begin{aligned}
\mathrm{Q}'_x &= \left(1+\frac{i}{2}\right) v^{x+1}\, l_{x+\frac{1}{2}} + 1 + \frac{i}{2}\, v^{x+2}\, l_{x+1\frac{1}{2}} \;.\;.\;.\;.\;. \\
&= \mathrm{P}'_x + \mathrm{P}'_{x+1} + \mathrm{P}'_{x+2} \;.\;.\;.\;.\;.\;. \\
\mathrm{M}'_x &= \left(1+\frac{i}{2}\right) v^{x+1}\, d_x + \left(1+\frac{i}{2}\right) v^{x+2}\, d_{x+1} \;.\;.\;.\;.\;.\;. \\
&= \mathrm{C}'_x + \mathrm{C}'_{x+1} + \mathrm{C}'_{x+2} \;.\;.\;.\;.\;.\;. \\
&= \left(1+\frac{i}{2}\right) \mathrm{M}_x
\end{aligned}
$$

From $\pi \mathrm{Q}'_{x|n} = s\mathrm{M}'_{x|n}$ we have $\pi = s\dfrac{\mathrm{M}'_{x|n}}{\mathrm{Q}'_{x|n}}$; and when $s = 1$, and $x + n = \omega$,

$\pi'_x = \dfrac{\mathrm{M}'_x}{\mathrm{Q}'_x}$ = annual premium paid continuously to insure £1 at the date of death.

$\Pi'_x = \dfrac{\mathrm{M}'_x}{\mathrm{D}_x} = \left(1+\dfrac{i}{2}\right)\dfrac{\mathrm{M}_x}{\mathrm{D}_x} = \left(1+\dfrac{i}{2}\right)\Pi_x$ = the present value of, or the single premium to insure, £1 payable at death.

$\mathrm{A}'_x = \dfrac{\mathrm{Q}'_x}{\mathrm{D}_x}$ = the present value of an annuity of £1 paid continuously through the year, or, for instance, $\dfrac{£1}{365\frac{1}{4}}$ daily, $\dfrac{7}{365\frac{1}{4}}$ £1 weekly.

$\mathrm{H}'_{x+n} = \dfrac{\pi \mathrm{Q}'_{x|n} - s\mathrm{M}'_{x|n}}{\mathrm{D}_{x+n}}$ = the sum in deposit to the account of each policy, after π has been paid in yearly for n years, and s has been paid on each death.

$\Pi'_{xn} = \dfrac{2\,\mathrm{M}'_{x|n}}{\mathrm{D}_x}$ = single premium to insure £1 a year in sickness occurring between ages x and $x + n$ (approximative).

$\pi'_{xn} = \dfrac{2\,\mathrm{M}'_{x|n}}{\mathrm{Q}'_{x|n}}$ = annual premium to insure £1 a year in sickness, between ages x and $x + n$. Premiums and outpayments are assumed to be paid continuously. If the above premium is paid *monthly* it insures £1 *a month*; if *weekly*, £1 *a week*, in sickness (approximative).

EXAMPLE:— $\pi_{20|45} = \dfrac{2\,\mathrm{M}'_{20|45}}{\mathrm{Q}'_{20|45}} = \dfrac{101312}{3788851} = \overset{£}{\cdot 02674}$ = the annual premium commenced at age 20 to insure £1 a year in sickness. Thus a person aged 20, by paying £2 13*s.* 5*d.* a year, insures £100 a year during sickness, or 6½*d.* per week insures £1 a week during sickness up to the age of 65.

PROBABILITY THAT X WILL DIE BEFORE Z.

This is expressed by the series—

$$\mu_{\overset{1}{x}z} = \frac{d_x\ l_{z+\frac{1}{2}} + d_{x+1}\ l_{z+1\frac{1}{2}} + d_{x+2}\ l_{z+2\frac{1}{2}}}{l_x\ l_z} \ldots\ldots\ldots\ldots\ldots\ldots$$

$$\text{And } \Pi_{\overset{1}{x}z} = \frac{v^1\ d_x\ l_{z+\frac{1}{2}} + v^2\ d_{x+1}\ l_{z+1\frac{1}{2}} + v^3\ d_{x+2}\ l_{z+2\frac{1}{2}}}{l_x\ l_z} \ldots\ldots\ldots\ldots$$

$$= \frac{v^{\frac{x+z}{2}+1}\, d_x\, l_{z+\frac{1}{2}} + v^{\frac{x+z}{2}+2}\, d_{x+1}\, l_{z+1\frac{1}{2}} + v^{\frac{x+z}{2}+3}\, d_{x+2}\, l_{z+2\frac{1}{2}}}{v^{\frac{x+z}{2}}\ l_x\ l_z} = \mathrm{D}_{xz} \ldots\ldots$$

of which the value has already been expressed in another form, and is found by the Two-Life Tables (*See* formulas pp. xcv and xcvi). Mr. Sang and Mr. Chisholm first employed and calculated this last series for the Carlisle Table.

The probability is also found approximatively from the afterlifetime. Thus, let the expectation of X be longer than that of Z, and if the afterlifetimes are respectively E_x and E_z, then

$$\mu_{\overset{1}{x}z} = \frac{\mathrm{E}_z}{2\ \mathrm{E}_x} = \text{probability that X will die } \textit{first} \text{ of the two;}$$

$$\text{and } \mu_{x\overset{1}{z}} = 1 - \mu_{\overset{1}{x}z} = \text{the probability that X will } \textit{not}\text{, but that Z } \textit{will}\text{, die } \textit{first.}$$

This is by Demoivre's hypothesis; and "will be sufficiently correct if the "two lives are between 10 and 70 years of age; at least till we are possessed of "more enlarged Tables on the subject."*

The Table of Afterlifetime (p. cli) serves to answer these questions by common arithmetic; while the Tables of $\lambda\, l_x$ and $\lambda\, \mathrm{Q}_x$ (pp. 28–29 and 32–33) supply answers by logarithms: thus,

$$\lambda\, \mu_{\overset{1}{x}z} = \lambda \left(\frac{\mathrm{Q}_z}{l_z}\right) + \lambda \left(\frac{l_x}{\mathrm{Q}_x}\right) + \kappa\, 2$$

$$\text{EXAMPLE: } \mathrm{E}_z = \frac{\mathrm{Q}_z}{l_z}\text{; and } \frac{1}{2\ \mathrm{E}_x} = \frac{l_x}{2\ \mathrm{Q}_x}$$

$$\text{Then } \mu_{\overset{1}{15},\,40} = \lambda \left(\frac{\mathrm{Q}_{40}}{l_{40}}\right) + \lambda \left(\frac{l_{15}}{\mathrm{Q}_{15}}\right) + \kappa\, 2$$

$$\lambda\ \mathrm{E}_z = \lambda \left(\frac{\mathrm{Q}_z}{l_z}\right) = \lambda \left(\frac{\mathrm{Q}_{40}}{l_{40}}\right) = 1{\cdot}4367883$$

$$\lambda \left(\frac{1}{\mathrm{E}_x}\right) = \lambda \left(\frac{l_x}{\mathrm{Q}_x}\right) = \lambda \left(\frac{l_{15}}{\mathrm{Q}_{15}}\right) = \bar{2}{\cdot}3647175$$

$$\kappa\, 2 = \bar{1}{\cdot}6989700$$

$\bar{1}{\cdot}5004758$; or ·31657 = probability that a son aged 15 will die before his mother aged 40;

and ·68343 = probability that the mother will die first.

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* Baily on Annuities, p. 114. *See also* Dr. Young's Works, vol. 2, p. 397.

LIFE VALUES DEPENDENT ON THE ORDER IN WHICH THE LIVES DROP.

The probability that X will die before Z or after Z is simply expressed, but when the order of death is taken into account, and the lives exceed two, the varieties of the possible combinations become excessively numerous.

Mr. Milne has given a very complete scheme of formulas for three lives, and Baily has also discussed this subject, which was first elaborately opened in papers by Mr. Morgan. In the Tables of a supplementary volume this branch of the subject may be dealt with.

In the meantime it may be worth while observing that little is gained by the transformations of the expressions into series corresponding to those from which the values of annuities on three, four, or more lives are concerned, if exact results are desired. For the direct series can often be calculated with more facility than the series for the annuities. Thus the probability that X will die first of three lives X and Y and Z is,—

$$\mu^{1}_{xyz} = \frac{\begin{array}{c} l_{y+1} \cdot l_{z+1}\, d_x + l_{y+1} \cdot \frac{d_z}{2}\, d_x + l_{z+1} \frac{d_y}{2}\, d_x + \frac{d_x\, d_y\, d_z}{3} \\ l_{y+2} \cdot l_{z+2}\, d_{x+1} + l_{y+2} \cdot \frac{d_{z+1}}{2} \cdot d_{x+1} + l_{z+2} \cdot \frac{d_{y+1}}{2} \cdot d_{x+1} + \frac{d_{x+1} \cdot d_{y+1} \cdot d_{z+1}}{3} \\ \cdots \qquad \cdots\cdots \qquad \cdots\cdots \\ \cdots \qquad \cdots\cdots \qquad \cdots\cdots \end{array}}{l_x\, l_y\, l_z}$$

This may be written in a more condensed form; and the following are the first terms of the five series, from which the probability that X will die first is deduced; and by inserting $v^{\frac{x+y+z}{3}}$ the series serves to show the present value of £1 payable at the end of the year in which X dies, if Y and Z are alive at the moment of his death:

$$\left(\frac{v^{\frac{x+y+z}{3}+1}}{v^{\frac{x+y+z}{3}}\, l_{xyz}}\right) \cdot \left(\overset{(1)}{l_{(xyz)+1}} + \overset{(2)}{l_{(yz)+1}\, d_x} + \overset{(3)}{l_{y+1} \frac{d_{zx}}{2}} + \overset{(4)}{l_{z+1} \frac{d_{yx}}{2}} + \overset{(5)}{\frac{d_{xyz}}{3}}\right)$$

Each series terminates when any factor in it becomes zero, as is invariably the case at the ultimate age ω of the Life Table; and it is only requisite to divide the sums of (3) and (4) by 2, of (5) by 3, to get the final values.

In like manner are found the values of £1 dependent on the death of Y or of Z being the first. They may be picked out from the following scheme of suffixes, where it will be observed that $x + 1$, $y + 1$, and $z + 1$ apply to l, while x, y, and z go to d. For Y take every term in which d_y occurs, for Z every term in which d_z is found.

$$\begin{aligned} + xyz = (x+1)(y+1)(z+1) + (x+1)(y+1)\,z + (x+1)\,yz + xyz \\ + (x+1)(z+1)\,y + (y+1)\,xz \\ + (y+1)(z+1)\,x + (z+1)\,xy \end{aligned}$$

The scheme may be extended to any extent, and it is evident that the terms do not increase at the same rate as when each letter expressive of d is replaced by two terms. It will only be necessary to notice that when the deaths are 2, 3, . . . n their terms are divided by 2, 3, or n, as the case may be.

It is evident that the sum may be made contingent on X dying first, second, or third in order; on his dying first or second, first or third; on his dying second or third; on his dying first, second, or third, in which case we have the ordinary value $\Pi_x =$ the value of £1 payable at the death of X. The value is thus contracted or extended with the chances on which its payment is contingent. A value may depend upon the same contingencies affecting Y, or similar contingencies affecting Z. And as the number of lives involved increases, the combinations become endless; but for each class of contingencies the series can be calculated from the logarithms of the radical columns l_x and l_y, d_x and d_y, and v^x of the new Tables.

3. SYNONYMS.

The form of the Columnar Annuity and Insurance Table remains the same as it was in the Sixth Annual Report (1844); and the columns D, N, and S; C, M, and R, thus stand now in the same relation to each other as they did in the first Life Table.

Ages x	D_x	N_x	S_x	C_x	M_x	R_x
0	511,745	9,800,236	206,018,049	81,280·58	226,301·22	3,799,711·50
1	415,559	9,288,491	196,217,813	25,941·18	145,020·64	3,573,410·28
2	377,514	8,872,932	186,929,322	13,008·74	119,079·46	3,428,389·64

Thus as the C_0 against age 0 is included in M_0, and M_0 is included in R_0, so D_0 is included in N_0, and N_0 in S_0. The simplicity of the arrangement makes all clear and evident.

Mr. Griffith Davies, to whom science owes improved adaptations of Barrett's method, committed one mistake, which has led to confusion: he raised the number in columns N and S one place, and thus adopted an anomalous arrangement of the columns of the same table. Under his arrangement, which was adopted by Mr. David Jones, the numbers would be arranged thus:—

Age x	D_x	N_x	S_x	C_x	M_x	R_x
		9,800,236	206,018,049			
0	511,745	9,288,491	196,217,813	81,280·58	226,301·22	3,799,711·50
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Entertaining the highest respect for Griffith Davies, and desirous to retain his forms, I had to choose between the alternative of perpetuating his fortuitous derangement of the natural order of the columns, to the confusion of future students, or of embarrassing by a change of symbols those who had already grown accustomed to the derangement. I felt also the inconvenience of altering what Professor De Morgan had left intact in his Classical Tracts. But I decided in favour of the natural arrangement of the columns, which has been ever since adhered to, and found to work satisfactorily; and I retained the letters N and S. The change was distinctly notified in the following terms:—

" An important point to attend to is, that Mr. Davies raised the numbers in " columns N and S one line, so that his N_{x-1} and S_{x-1} correspond with N_x and S_x " in the present Tables; and his N_x and S_x with N_{x+1} and S_{x+1}. His N_x does not " include D_x." [In the natural arrangement $N_x = D_x + D_{x+1} + D_{x+2} \ldots\ldots$; and Mr. Davies struck out the D_x or the first term of the series.]

" This derangement of the simple relations of the respective columns for the " supposed and not for the real convenience of the computer, always appeared to " me the reverse of an improvement; and upon finding that the columns y and " $S \cdot y$ in Duvillard's Tables, and the original columns A and B of Barrett's " Table, stand in the same relation to each other as they now stand in the English " Tables, I adopted that arrangement without hesitation. Mr. Davies's other " alterations and additions display great ingenuity, and were unquestionable " improvements." *

The same tabular form was kept up in the Second English Life Table, which was published in 1853 in the Appendix to the Registrar General's Twelfth Annual Report; and Mr. David Chisholm in 1858 adopted the same columnar arrangement of the series D_x, N_x, and S_x; C_x, M_x, and R_x, in his valuable Tables based on the Carlisle mortality; so it is not likely that the columns N and S will ever again be displaced.

In using the formulas of Davies, Jones, and Professor De Morgan with the English Table, add 1 to the suffix x of N and S; thus N_{x-1} becomes N_x, and S_{x-1} becomes S_x, while N_x becomes N_{x+1} and S_x becomes S_{x+1}. The formula $\frac{N_x}{D_x} = A_x$ in this volume is written $\frac{N_{x-1}}{D_x}$ by Davies and Professor De Morgan.

The first volume of the Assurance Magazine (1851) contained a remarkable article by Mr. Hendriks, one of the most learned actuaries of the day, in which he showed that the columnar method was discovered and published in 1785 by Tetens, a Dane of Schleswig, Professor of Mathematics in the University of Kiel.†

Tetens described the uses of the columns l_x and L_x; of D_x and N_x and S_x; of C_x and M_x; and his arrangement of the columns D_x and N_x was precisely the

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Here is the Tabular Form as it was printed in 1785 by TETENS, the inventor of the columnar method :—

A	B	C	D	E
Alter.	Lebende nach Sussmilch.	Die Zahlen in B, discontirt auf die Jahre des Alters für $r = 1\cdot04$.	Summen der Zahlen in B von hinten an addirt.	Summen der Zahlen in C von hinten an addirt.
x	l_x	$v^x l_x = D_x$	L_x	N_x
0	1000	1000	28988	12431·48
1	750	721·15	27988	11431·48
2	661	611·13	27238	10710·33

The symbol of the value of the annuity which I adopted was A_x, in the Registrar General's Twelfth Annual Report (date Sept. 5, 1853). The following definitions occur at p. 3 of the Appendix :—

$A_x = \frac{N_x}{D_x}$ = the present value of an annuity of £ 1 a year for life. Payment of annuity at the age x, and at the commencement of every subsequent year.

$a_x = \frac{D_x}{N_x}$ = the annuity which £ 1 will provide; first payment at age x.

The old practice had been to take A as the value of a life annuity of £ 1 payable at the end of every complete year that a life *A* survived ; the value of which at age x in the new notation, is thus expressed, $A = \frac{N_{x+1}}{D_x}$; or putting $x = 20$ we have $A_{20} = \frac{N_{20}}{D_{20}} = 22\cdot0612$, which becomes $21\cdot0612$ on subtracting unity : the $\frac{N_{21}}{D_{20}} = 21\cdot0612$ for obvious reasons. This is the value of an annual payment, of which the first payment is deferred *one* year, and is contingent on the life attaining the age $x + 1 =$ in this case 21; it is properly a deferred annuity in the same sense as $A_{x|n} = \frac{N_{x+n}}{D_x}$ of which the first payment is made at the end of n years if the life X be then alive. It is easily recollected that these values are invariably those of periodical payments, of which the first is due.

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The passage from the values of A_x to $A_x - 1 = A$ is easily made; and $1 + A$ may serve instead of A_x. But practically the values of both A_x and a_x are of much more frequent use than $A_x - 1$ and $\frac{1}{A_x - 1}$; as will be seen on referring to Mr. Milne's formulas. They are required for nearly all Life Insurance problems, and though the passage from A_x to $A_x - 1$ is easy, that is not the case with the logarithms of the series A_x; and these logarithms are of frequent use. The annual premium to insure £1 at death is, it will be recollected, $\pi_x = a_x - d$ for the single life, and $\pi_{xyz} = a_{xyz} - d$ for the joint lives.

By taking $A_{xn} = \frac{N_{x|n}}{D_x}$ and $A_{x|n} = \frac{N_{x+n}}{D_x}$ in all cases of temporary and deferred annuities, a logical consistency is maintained, and the confusion is avoided which even misled Simpson and Price in some instances by the ambiguity which the old symbol involved.

To Mr. Sang of Edinburgh, an original writer, belongs, I believe, the merit of having, in his masterly series of Life Assurance and Annuity Tables (1841), first discarded the routine practice of writers, and of giving Tables of the values of life and short-period annuities, "first payment to be made just now." Mr. Chisholm unfortunately did not follow his example, and he writes $a_x = \frac{N_{x+1}}{D_x}$, thus appropriating this symbol which is required for $\frac{D_x}{N_x}$; and writing A_x for Π_x, the single premium to insure £1 at the end of the year in which the life fails.

In the English Tables $D_{xy} = v^{\frac{x+y}{2}} l_x l_y$; while in those of Mr. David Jones and Mr. Chisholm $D_{xy} = v^x l_x l_y = D_x l_y$. They make x the age of the *oldest* life. The change which we have introduced simplifies the formulas for the insurance of one life against another, and it was suggested by Professor De Morgan. It is evident that the value of v^n is arbitrary in the following formulas, and may be put $n = x, n = y$, or $n = \frac{x+y}{2}$, as it disappears:

$$A_x = \frac{v^{\frac{x+y}{2}} l_x l_y + v^{\frac{x+y}{2}+1} l_{x+1} \cdot l_{y+1} \cdot \cdot \cdot \cdot \cdot}{v^{\frac{x+y}{2}} l_x l_y = D_{xy} \text{ of English Table; } x \text{ being the age of either the oldest or the youngest life.}}$$

$$= \frac{v^x l_x l_y + v^{x+1} l_{x+1} \cdot l_{y+1} \cdot \cdot \cdot \cdot \cdot \cdot}{v^x l_x l_y = D_{xy} \text{ of Chisholm or D. Jones, who make } x \text{ always the age of the oldest life X.}}$$

$$= \frac{l_x l_y + v^1 l_{x+1} l_{y+1} + \cdot \cdot \cdot \cdot \cdot}{l_x l_y}$$

The following is a specimen of Barrett's form of Table from Baily's paper, which was read before the Royal Society in the year 1812, and first published in 1813 as an Appendix to the Doctrine of Life Annuities and Assurances. It will be observed how Barrett writes the series

$$N_x = v^0 l_0 + v^1 l_1 + v^2 l_2 + v^3 l_3 \dots + v^x l_x \dots\dots$$

It is, taking ω for the last age of the Life Table,

$$A = r^{\omega} l_0 + r^{\omega-1} l_1 + r^{\omega-2} l_2 + r^{\omega-3} l_3 \dots\dots + r^{\omega-x} l_x.$$

The Tables are thus arranged, 96 being the last age :—

Age.	Col. 𝔄.	Col. 𝔅.
96	z	Z
95	yr	Y
94	xr^2	X
....	....	....
3	dr^{n-3}	D
2	cr^{n-2}	C
1	br^{n-1}	B
0	ar^n	A

The numbers in col. 𝔅. are the sums downwards of col. 𝔄.:

$$\text{thus, } Z = z\,;\ Y = yr + z\,;\ X = xr^2 + yr + z$$

$$A = ar^n + br^{n-1} \dots\dots + yr + z.$$

And $A_x = \dfrac{A}{ar^n}$ in this notation, is the value of an annuity of £1.

The arrangement and notation, in this crude form, possess the practical advantages of the columnar method, which are fairly stated by Baily, who had himself been accustomed to the old method.

I shall give briefly the synonyms and symbols of earlier notations :—

Demoivre makes the annuity 1; he calls r $(= 1 + i)$ "the rate of interest" and $r - 1 = i$ the interest of £1; $n =$ the complement of life; $P = V_n - 1$; and $A_n - 1 =$ "the value of the life" $= \dfrac{1 - \frac{r}{n} P}{r - 1}$. He denotes the value of an Annuity upon two Joint Lives, whose single values are M and P, by $\overline{MP}$:

$$\text{So } A_{xy} = 1 + \overline{MP}\,;\ \text{and } A_{xyz} = 1 + \overline{MPZ}.$$

At page 281* he takes d as the interest of £1; $\dfrac{1}{r-1} = \dfrac{1}{i}$ is the "value of the perpetuity." He calls "the expectation of life the time which a person of a given age may justly expect to continue in being" (p. 288); for one life it is "upon supposition of an equal decrement of life" $\frac{1}{2}n$; and for two lives of complements n (the longest) and p it will be $\frac{1}{2}p - \frac{p^2}{2 \cdot 3n} \ldots$, &c. &c.

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* "Treatise of Annuities on Lives."

SIMPSON'S symbols:—

$1 + i \quad = r$ in Annuities.

$\mathrm{V} \quad = E$

Lives X, Y, Z $\quad = A,\ B,\ C.$

$p_x,\ p_{x \cdot 2},\ p_{x \cdot 3} \quad = a,\ a',\ a''.$

$p_y,\ p_{y \cdot 2},\ p_{y \cdot 3} \quad = b,\ b',\ b''.$

$l_x,\ l_{x+1},\ l_{x+2} \quad = Q,\ Q',\ Q''.$

$l_{x-1},\ l_{x-2},\ l_{x-3} \quad = Q_{\prime},\ Q_{\prime\prime},\ Q_{\prime\prime\prime}.$

A_x and $\mathrm{A}_{xyz} \quad = 1 + \mathrm{P}$; P is the "value of the life, or lives."

DODSON[*] makes $1 + i = r$; $\frac{1}{r-1} = \mathrm{P}$; $m =$ the complement of life $= 86 - x$; $\mathrm{A}_x = 1 + \mathrm{N}$; $\mathrm{A}_{xyz} = 1 + \overline{\mathrm{NMF}}.$

Mr. MORGAN[†] expresses $1 + i$ by r; and $l_x, l_{x+1}, l_{x+2} \ldots$ by $a, b, c \ldots$; the probabilities that A will live one year or $p_x = \frac{b}{a}$; $p_{x \cdot 2} = \frac{c}{a} \ldots$ while m, n, o, p are put for $l_y, l_{y+1}, l_{y+2} \ldots$; and $p_y = \frac{n}{m}$; $\mathrm{A}_x = 1 + \mathrm{A}$; $\mathrm{A}_y = 1 + \mathrm{B}$; $\mathrm{A}_{xy} = 1 + \mathrm{AB}$; $\mathrm{A}_{x+n} = 1 + \mathrm{A}^z$.

Dr. PRICE'S[†] notation is simple: he appears to have paid little attention to the subject.

Mr. BAILY[‡] makes $1 + p = \left(1 + \frac{i}{n}\right)^n = 1 + \varrho$; which when interest is convertible annually becomes identical with $1 + i$: $v^n = (1 + \varrho)^{-n}$; $l_x = a$, $l_{x+1} = a'$, $l_{x+2} = a'' \ldots$; $l_y = b$, $l_{y+1} = b'$, $l_{y+2} = b'' \ldots$; the lives being indicated by the capital letters A, B, C . . .

l_{x+n} he writes α, $l_{x+n+1} = \alpha' \ldots$;

$l_{y+n} = \beta$, $l_{y+n+1} = \beta' \ldots$

$$p_{xyz} = \frac{a'b'c'}{abc};\ p_{xyz \cdot n} = \frac{\alpha\beta\gamma}{abc};$$

$$\mu_{xyz \cdot n} = 1 - p_{xyz \cdot n} = 1 - \frac{\alpha\beta\gamma}{abc}.$$

$$\mu_x = \frac{d_x}{l_x} = \frac{a - a'}{a};\ \mu_{x+n-1} = \frac{l_{x+n-1} - l_{x+n}}{l_x}$$

$$= \frac{d_{x+n-1}}{l_x} = \frac{{}_{\prime}\alpha - \alpha}{a} =$$ probability of dying in the n^{th} year after age x.

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[*] Mathematical Repository.

[†] *See* Morgan on Assurances, and his Edition of Price on Annuities.

[‡] Doctrine of Life Annuities. Baily is a luminous writer, but in his notation he is not happy, and it has gone entirely out of use; so it is a real service to science to bring out a new edition, as Mr. Filipowski has, with a modern notation. Those who have had practical experience know how difficult it is to attain accuracy in such work, and the new edition requires, and is, I am informed, undergoing, careful revision.

The values A_x, A_{xy}, A_{xyz}, are written $1 + A$, $1 + AB$, $1 + ABC$.

$A_{(xyz)-1} = \underset{\prime}{A}\underset{\prime}{B}\underset{\prime}{C}$; $A_{x+n} = 1 + A^{\circ}$.

$A_{x|n} = \dfrac{N_{x+n}}{D_x}$; while the value of the deferred annuity in Baily is $A^{d} = \dfrac{N_{x+n+1}}{D_x}$:

so $A_{x|n} = A^{n} + \dfrac{D_{x+n}}{D_x}$. Again, $A_{xn} = \dfrac{N_{x|n}}{D_x}$; and the temporary annuity for a term of n years, putting $\mathrm{t} = n$, is in Baily,—

$$A^{\mathrm{t}} = \frac{N_{x+1|n}}{D_x} = A_{xn} - \frac{(D_x - D_{x+n})}{D_x} = A_{xn} + \frac{D_{x+n}}{D_x} - 1 \ \therefore$$

$$A_{xn} = 1 + A^{\mathrm{t}-1};\ A_{\overline{xyz}} = 1 + L;\ A_{\overline{xyz}+n} = 1 + L^{0}$$

$$A_x = A_{xn} + A_{x|n} = 1 + A^{\mathrm{t}} + A^{\mathrm{d}}$$

$$A_{\overline{xy}} = 1 + L^{\mathrm{t}} + L^{\mathrm{d}}$$

$$\Pi_{xyz} = 1 - dA_{xyz} = \frac{1 - \varrho\, ABC}{1 + \varrho}$$

$$\pi_{xyz} = a_{xyz} - d = \frac{1 - \varrho\, ABC}{(1 + ABC)\,(1 + \varrho)}$$

Mr. DAVID JONES for our $r = 1 + i$ writes $1 + i$; and for $\dfrac{1}{1+i} = v$ he writes r; so in his formulas v^{n} is r^{n};

$$A_x = 1 + a_m;\ A_{xyz\ldots\ldots} = 1 + a_{m,\,m_1,\,m_2,\,\&c.};\ A_{\overline{xyz}\ldots}^{\,m} = 1 + a_{\overline{m,\,m_1,\,m_2}}^{\,v}\ldots;$$

For $A_{xn} = \dfrac{N_{x|n}}{D_x}$ Mr. Jones substitutes $a_{(m)_{n|}} = \dfrac{N_{x+1|n}}{D_x}$, which in Davies's notation is written $\dfrac{N_{x|n}}{D_x} = \dfrac{D_{x+1} + D_{x+2} \ldots\ldots + D_{x+n}}{D_x}$;

So $A_{xn} - a_{(x)_{\overline{n}|}} = \dfrac{D_x - D_{x+n}}{D_x}$.

For $A_{\overline{xyz\ldots n}}^{\,m}$ he uses $a_{\overline{m,\,m_1,\,m_2,\,\&c.\,\&c.}\,\overline{n}|}^{\,v}$ which is evidently not its equivalent: it is modified as above.

$$A_{xyz\ldots\ldots|n} = \frac{N_{x+n}}{D_x} = \frac{N_{x+n-1}}{D_x} \text{ in his notation;}$$

and $a_{\overline{m}|n} = \dfrac{N_{x+n+1}}{D_x}$ in English Table notation.

$$\Pi_x = A_m;\ \Pi_{xy} = A_{m,\,m_1};\ \Pi_{xy}^{1} = A_{\underset{(1)}{m,\,m_1}};\ \Pi_{xy}^{2} = A^{1}_{\underset{(2)}{m,\,m_1}}\ldots\ldots;$$

$$d_x = d_m;\ E_x = e_m;\ p_{x\,.\,n} = p_{m,\,n}.$$

Formulas $\Pi_{xy} = 1 - dA_{xy} = r - (1 - r)\, a_{m, m_1}$ (Jones)

$$\pi_{xy} = a_{xy} - d = \frac{1}{1 + a_{m, m_1}} - (1 - r) \quad \text{(Jones)}$$

$$\pi_{\overline{xy}} = a_{\overline{xy}} - d = \frac{1}{1 + a_m + a_{m_1} - a_{m, m_1}} - (1 - r) \quad \text{(Jones)}$$

$$\pi_{xn} = \frac{M_{x \mid n}}{N_{x \mid n}} = \frac{D_{x \mid n} - dN_{x \mid n}}{N_{x \mid n}} = \frac{vN_{x \mid n} - N_{x+1 \mid n}}{N_{x \mid n}} = v - \frac{N_{x+1 \mid n}}{N_{x \mid n}}$$

becomes in Mr. Jones's Tables and notation

$$= \frac{r(N_{m-1} - N_{m+n-1}) - (N_m - N_{m+n})}{N_{m-1} - N_{m+n-1}}.$$

The N_m becomes N_{m-1} awkwardly in nearly all Mr. Jones's formulas for Insurance, in consequence of Mr. Davies having by a slip of his pen, as it were, put D_m in N_{m-1}, instead of putting it in N_m. Mr. Jones's volumes contain many useful formulas.

It will be seen that $\pi_{xn} = v - \frac{N_{x+1 \mid n}}{N_{x \mid n}} = \frac{D_{x \mid n}}{N_{x \mid n}} + v - 1$; which will be compared with the notation of Mr. Milne.

Three uses of the literal r.—This letter was used by Halley, Demoivre, Simpson (in his Treatise on Annuities), Dr. Price, and Mr. Morgan to express the rate $(1 + i)$ at which money increases. Thus $(r - 1)$ was the increase of £ 1 in one year; $\frac{1}{r}$ = value of £ 1 due in a year; r = the sum payable at the end of the year, of which £ 1 is the present value.

Baily changed the significance of r; his $1 + r$ is the r of Demoivre. Mr. Milne employed r in the same way as Baily. Baily introduced $1 + \varrho$.

Finally, Mr. David Jones strangely enough put r for the $\frac{1}{r}$ of Demoivre; the $(1 + r)^{-1}$ of Baily; and the $v \left(= \frac{1}{1 + i}\right)$ of Milne, which is now thoroughly established.

In the various reports I have adopted Mr. Milne's v, and restored the r to its original sense as it was used by Halley and Demoivre, Price and Morgan.

PROFESSOR DE MORGAN, in two valuable papers, gives a variety of useful formulas. " It is," he says, " Barrett's method, as improved by Mr. Davies (1825), which we " propose to present to the reader, with some extension of notation and generaliza- " tion of processes."—(*Companion to the Almanack for* 1840.) In the notation D, N, S, C, M, and R are given with suffixes; in making $N_x = D_{x+1} + D_{x+2} \ldots$; and $S_x = N_x + N_{x+1} \ldots$ he followed Mr. Davies. His N_{x-1}, which frequently occurs, is consequently our N_x; his S_{x-1} is our $S_x = D_x + 2\,D_{x+1} + 3\,D_{x+2} \ldots\ldots$

It is difficult to conceive the amount of confusion, which is avoided by taking $N_x = D_x + D_{x+1} \ldots$, precisely as $M_x = C_x + C_{x+1} \ldots\ldots$; and also by taking $A_x = \frac{N_x}{D_x}$, which Professor De Morgan calls "an annuity due." The annuity of the old writers (A) is an annuity deferred *one* year; while their annuity deferred for 19 years is really an annuity deferred 20 years, at the end of which the first payment is made. Their symbols cannot be confounded with ours, as they were never written with suffixes.

In Professor De Morgan's paper, No. 2., for 1842, he writes $D_{xy} = D_{m,n} = a_m a_n v^k$, and suggests that k should be taken at $\frac{1}{2}(m + n)$, which we have adopted in the Two-Life Tables. In his second paper he writes $N_{xy|n}$ for $N_{xy} - N_{x+n, y+n}$, which we have also adopted, as it is clear, and contributes to the elegance of the formulas into which it enters.

Professor De Morgan, in his Essay on Probabilities, describes a new notation; and Mr. Peter Hardy, whose loss we have had recently to deplore, has also proposed a notation quite different from that hitherto in use. Both writers should be consulted. Mr. Hardy, in a "Table of the proposed Notation," gives expressions for nearly all the contingencies which occur in practice affecting three lives.

Notwithstanding its incalculable importance, no writer before MR. MILNE had paid sufficient attention to notation; and we are indebted to him for the first complete scheme, which, had it not been for the introduction of the columnar method, would probably now have been in general use.

X, Y, Z. (the lives)	are written by Mr. Milne	*A, B, C.*
l_x l_y, l_z.	„ „ „ „ „	a, b, c.
l_{x+n}, l_{y+n}, l_{z+n}.	„ „ „ „ „	${}^n a$, ${}^n b$, ${}^n c$.
l_{x-n}, l_{y-n}, l_{z-n}.	„ „ „ „ „	a_n, b_n, c_n.
$p_{x.n}$, $p_{y.n}$, $p_{z.n}$.	„ „ „ „ „	${}_n a$, ${}_n b$, ${}_n c$.
$p_{(xyz\ldots\ldots\ldots).n}$.	„ „ „ „ „	${}_n(a\,b\,c$ &c.$)$
E_x, E_y, E_z.	„ „ „ „ „	a, b, c.
E_{x+n}, E_{y+n}, E_{z+n}.	„ „ „ „ „	${}^t\mathrm{a}$, ${}^t\mathrm{b}$, ${}^t\mathrm{c}$.
E_{xyz}, and $E_{\overset{m}{\overline{xyz}}}$	„ „ „ „ „	abc, and $\overset{m}{\overline{\mathrm{abc}}}$.
A_x, A_y, A_z.	„ „ „ „ „	1 + A; 1 + B; 1 + C.
A_{xyz}, and $A_{\overset{m}{\overline{xyz}}}$.	„ „ „ „ „	1 + ABC, and $1 + \overset{m}{\overline{\mathrm{ABC}}}$.
Π_x, Π_y, Π_z.	„ „ „ „ „	$\mathfrak{A}$, $\mathfrak{B}$, $\mathfrak{C}$.
Π_{xyz}.	„ „ „ „ „	$\mathfrak{A}\mathfrak{B}\mathfrak{C}$.
π_x, π_y, π_z.	„ „ „ „ „	$\odot\mathfrak{A}$, $\odot\mathfrak{B}$, $\odot\mathfrak{C}$.

$\pi_{xyz}\,;\ \pi_{uvw]}$	are written by Mr. Milne	$\odot\mathfrak{A}\mathfrak{B}\mathfrak{C}.$
$\Pi_{xy} = \Pi_{\overset{1}{x}y} + \Pi_{x\overset{1}{y}}$	" " " " "	$\mathfrak{A}\mathfrak{B} = \underset{1}{\mathfrak{A}}\mathfrak{B} + \underset{1}{\mathfrak{B}}\mathfrak{A}$
$\Pi_{\overline{xy}} = \Pi_{\overset{2}{x}y} + \Pi_{x\overset{2}{y}}$	" " " " "	$\overline{\mathfrak{A}\mathfrak{B}} = \underset{11}{\mathfrak{A}}\mathfrak{B} + \underset{11}{\mathfrak{B}}\mathfrak{A}$
$A_{x+n},\ A_{y+n}.$	" " " " "	$1 + {}^{t}\mathrm{A},\ 1 + {}^{t}\mathrm{B}.$
$A_{x-n},\ A_{y-n}.$	" " " " "	$1 + \mathrm{A}_{t},\ 1 + \mathrm{B}_{t}.$
$A_{(xyz)+n}.$	" " " " "	$1 + {}^{t}(\mathrm{ABC}).$
$A_{\overline{xy}},$ and $A_{\overline{xyz}}.$	" " " " "	$1 + \overline{\mathrm{AB}},$ and $1 + \overline{\mathrm{ABC}}.$
$A_{\overset{m}{\overline{xyz\ldots\ldots}}}.$	" " " " "	$1 + \overset{m}{\overline{\mathrm{ABC}\ \&c.}}$
$\dfrac{N_{(xy)+1\mid t}}{D_{xy}}$	" " " " "	$\overline{t\vert}\ \mathrm{AB},$ or $\overline{n\vert}\ \mathrm{AB}.$
$\dfrac{N_{(xy)+n+1}}{D_{xy}}$	" " " " "	$\rceil_{t}\mathrm{AB},$ or $\rceil_{n}\mathrm{AB}.$

NOTE.—$A_{xyt} = \dfrac{N_{xy\mid t}}{D_{xy}} = 1 + \overline{t-1\vert}\ \mathrm{AB}$ in Mr. Milne's notation.

$A_{x\mid y},\ A_{xy\mid\overline{wz}},$	are written by Mr. Milne	$\rceil^{\mathrm{P}}\mathrm{A},\ \rceil^{\overline{\mathrm{PQ}}}\mathrm{AB}.$
$A_{\overline{xy}\mid z}$	" " " " "	$\rceil^{\mathrm{P}}\overline{\mathrm{AB}}.$

For the figure 1 Mr. Milne often substitutes dashes; thus ${}^{1}a,\ a_{1},\ {}^{1}(\mathrm{AB}),\ \mathrm{AB}_{1},$ are often written by him .... $'a,\ a_{,},\ '(\mathrm{AB}),\ \mathrm{AB}_{,}.$

The probability that X, Y, or Z will die in the n^{th} year is written—	The probability of dying in the n^{th} year is written by Mr. Milne—
$\mu_{x+n-1},\ \mu_{y+n-1},\ \mu_{z+n-1}$	${}_{n}\mathfrak{a},\ {}_{n}\mathfrak{b},\ {}_{n}\mathfrak{c}.$
$\mu_{(xyz)+n-1} = \dfrac{l_{xyz+n-1} - l_{xyz+n}}{l_{xyz}} = \dfrac{C_{xyz+n-1}}{l_{xyz}}$	${}_{n}(\mathfrak{a}\,\mathfrak{b}\,\mathfrak{c}).$
$\mu_{\overset{m}{\overline{(xyz)}}+n-1}$	$\overset{m}{\overline{{}_{n}(\mathfrak{a}\,\mathfrak{b}\,\mathfrak{c}).}}$

For	Mr. Milne writes
i	r
r	R
$\dfrac{1}{1+i} = v$	$\dfrac{1}{1+r} = v.$

The v we owe to Mr. Milne, as well as λr for common logarithm of r, and κr for the complement of the logarithm of r or any other quantity, and generally we write λ for logarithm, κ for complement of logarithm.

$\pi_x = a_x - d$ is written by Mr. Milne $= \dfrac{1}{1 + \mathrm{A}} + v - 1 = \odot\,\mathfrak{A}$

$\pi_{\overset{m}{\overline{xyz}}} = a_{\overset{m}{\overline{xyz}}} - d$ „ „ „ „ „ $\dfrac{1}{1 + \overset{m}{\overline{\mathrm{A\,B\,C}}}} + v - 1 = \odot\,\overset{m}{\overline{\mathfrak{A}\mathfrak{B}\mathfrak{C}}}$

$\pi_{xyz} = a_{xyz} - d$ „ „ „ „ „ $\dfrac{1}{1 + \mathrm{A\,B\,C}} + v - 1 = \odot\,\mathfrak{A}\mathfrak{B}\mathfrak{C}$

$\pi_{\overline{xyz}} = a_{\overline{xyz}} - d$ „ „ „ „ „ $\dfrac{1}{1 + \overline{\mathrm{A\,B\,C}}} + v - 1 = \odot\cdot\overline{\mathfrak{A}\mathfrak{B}\mathfrak{C}}$

Annual Premiums for a temporary insurance on the 3 joint lives X, Y, Z:

$$\pi_{xyzn} = \frac{\mathrm{D}_{xyz\,|\,n}}{\mathrm{N}_{xyz\,|\,n}} - d$$

is written by Mr. Milne:

$$\odot\,\overline{{}^{t}|}\,\mathfrak{A}\mathfrak{B}\mathfrak{C} = \frac{1 - \dfrac{{}^{t}(a\,b\,c)}{a\,b\,c}\,v^t}{1 + \mathrm{A\,B\,C} - \dfrac{{}^{t}(a\,b\,c)}{a\,b\,c}\,v^t\left[1 + {}^{t}(\mathrm{A\,B\,C})\right]} + v - 1.$$

The Journal of the Institute of Actuaries contains many useful formulas by Professor De Morgan, by Mr. Peter Gray, by Mr. Jellicoe, Mr. Brown, Mr. Sprague, Mr. Farren, and other Fellows of the Institute, who either employ the above notations or define their own symbols. The papers of Mr. Gompertz in the Transactions of the Royal Society, two papers by Sir John Lubbock in the Cambridge Philosophical Transactions, vol. 3., Mr. Babbage's Treatise on Insurance, the work of Mr. Edmonds on Annuities, the Tables of Mr. Sang, of Messrs. Gray, Smith, and Orchard, of Mr. Chisholm, and of Mr. Thomson, as well as the contributions to Vital Statistics by Mr. Neison, and the reports of Mr. Finlaison, contain investigations or Tables which may be consulted with advantage.

The above list of symbols, and of what I have ventured to call *synonyms*, will facilitate the use of the formulas in the treatises of Baily, Milne, and Jones. For systematic expositions of the Doctrines of Interest, see the works of Baily, Peter Hardy, and Fédor Thoman; also Griffith Davies on Annuities.

4. TYPES OF COMMON CALCULATIONS.

TWO LIVES; X AGED x, AND Y AGED y.

Take X, for example, age 30, and his wife, age 25; let interest be 3 per cent., and the annuity be payable at the beginning of every life-year; the insurances at the end of the death-year.

All the values of annuities, and premiums for the lives taken singly, are given at page 52 for males, page 86 for females. The logarithms of $N_{30, 25}$ and $D_{30, 25}$ are found under the age ($y = 25$) of the female, page 192; and by using compasses for pointers their differences are readily taken out without transcription.

$$x = 30;\ y = 25$$

$$
\begin{aligned}
\text{Constants:}\quad v &= {\cdot}9708738 \\
\lambda\, v &= \bar{1}{\cdot}9871628 \\
\lambda\, v^{\frac{1}{2}} &= \bar{1}{\cdot}9935814 \\
\lambda\, d &= \bar{2}{\cdot}4642840
\end{aligned}
$$

$$
\begin{aligned}
&\lambda\, D_{x, y} && = 5{\cdot}6283747 \\
&\lambda\, N_{x, y} && = 6{\cdot}8526138 \\
&\lambda\, D_{x, y} - \lambda\, N_{x, y} = \lambda\, a_{x, y} && = \bar{2}{\cdot}7757609\ ;\ a_{xy} = a_{30, 25} = {\cdot}059671 \\
&\lambda\, N_{x, y} - \lambda\, D_{x, y} = \lambda\, A_{x, y} && = 1{\cdot}2242391\ ;\ A_{xy} = A_{30, 25} = 16{\cdot}7587 \\
&\lambda\, d && = \bar{2}{\cdot}4642840 \\
&\lambda\, (dA_{x, y}) && = \bar{1}{\cdot}6885231\ ;\ dA_{x, y} = {\cdot}48812
\end{aligned}
$$

Survivorship Insurances.

$$
\begin{aligned}
&N_{x, y+1} && = 6{,}919{,}933 \text{ (p. 252)} \\
&N_{x+1, y} && = 6{,}892{,}099 \text{ (p. 254)} \\
& && 2\,)\ \ 27{,}834 = b \\
&\frac{N_{x, y+1} - N_{x+1, y}}{2} && = \ \ 13{,}917 \quad 4{\cdot}1435456 \\
& && \lambda\, v^{\frac{1}{2}} = \bar{1}{\cdot}9935814 \\
& && \kappa\, D_{x, y} = \bar{6}{\cdot}3716253 \\
& && \kappa\, N_{x, y} = \bar{7}{\cdot}1473862
\end{aligned}
$$

$$\lambda\left(\frac{\frac{1}{2}\,b}{D_{x, y}}\right) = \lambda\, 13{,}917 + \lambda\, v^{\frac{1}{2}} + \kappa\, D_{x, y} = \bar{2}{\cdot}5087523\ ;\ \frac{\frac{1}{2}\,b}{D_{xy}} = \frac{\frac{1}{2}\,b}{D_{30, 25}} = {\cdot}032267$$

$$\lambda\left(\frac{\frac{1}{2}\,b}{N_{x, y}}\right) = \lambda\, 13{,}917 + \lambda\, v^{\frac{1}{2}} + \kappa\, N_{x, y} = \bar{3}{\cdot}2845132\ ;\ \frac{\frac{1}{2}\,b}{N_{x, y}} = \frac{\frac{1}{2}\,b}{N_{30, 25}} = {\cdot}001925$$

From the above elements all the ordinary values are found.

$A_{30, 25} = 16{\cdot}7587$; and £1675·87 is the value of a life annuity of £100 first payment due; its reciprocal is $a_{30, 25} = {\cdot}059671$; and £100 is the value of an annuity of £5·967; if the first payment is due a year hence £94·033 is the worth of such a life annuity.

$\Pi_{30,25} = 1 - d\mathrm{A}_{30,25} = 1 - {\cdot}48812 = {\cdot}51188$; and the single premium £51·188 insures £100 payable on the *first* death.

$\pi_{30,25} = a_{30,25} + v - 1 = {\cdot}059671 + {\cdot}970874 - 1 = {\cdot}030545$; and £3·0545 is the annual premium for the same sum.

$$\begin{aligned}\Pi_{\overline{30,25}} &= \Pi_{30} + \Pi_{25} + d\mathrm{A}_{30,25} - 1\,;\\ &= {\cdot}41706 + {\cdot}37926 + {\cdot}48812 - 1 = {\cdot}28444\end{aligned}$$

The single premium to insure £100 on the *last* death is £28·444.

$$\mathrm{A}_{\overline{30,25}} = \mathrm{A}_{30} + \mathrm{A}_{25} - \mathrm{A}_{30,25} = 20{\cdot}0143 + 21{\cdot}3120 + (100 - 16{\cdot}7587) - 100 = 24{\cdot}5676$$

$$\begin{array}{r} 20{\cdot}0143\\ 21{\cdot}3120\\ -\,16{\cdot}7587\\ \hline 24{\cdot}5676\\ \hline\hline \end{array}$$

$$\begin{array}{lll} \pi_{\overline{xy}} = \dfrac{\Pi_{\overline{x,y}}}{\mathrm{A}_{\overline{x,y}}} = \dfrac{{\cdot}28444}{24{\cdot}5676}\,; & \bar{1}{\cdot}4539907 \\ & 1{\cdot}3903627 \\ \cline{2-2} \pi_{\overline{x,y}} \qquad\quad = {\cdot}011578\,; & \bar{2}{\cdot}0636280 \end{array}$$

The annual premium payable during the *longest* life to insure £100 on its extinction is £1·1578.

Survivorship Insurances.

$$\Pi_{\overset{1}{30},25} = \frac{\Pi_{30,25}}{2} + \frac{b}{2\,\mathrm{D}_{30,25}} = {\cdot}25594 + {\cdot}03227 = {\cdot}28821$$

$$\Pi_{30,\overset{1}{25}} = \frac{\Pi_{30,25}}{2} - \frac{b}{2\,\mathrm{D}_{30,25}} = {\cdot}25594 - {\cdot}03227 = {\cdot}22367$$

Thus the single premium to insure £100 on the death of X, age 30, provided it happen during the life of Y, is £28·821. The premium for the corresponding insurance on Y is £22·367; and, by addition, the two premiums make £51·188 = the single premium to insure £100 on the *first* death, be it X or Y.

$$\pi_{\overset{1}{30},25} = \frac{\pi_{30,25}}{2} + \frac{b}{2\,\mathrm{N}_{30,25}} = \frac{{\cdot}030545}{2} + {\cdot}001925 = {\cdot}015273 + {\cdot}001925 = {\cdot}017198$$

$\pi_{30,\overset{1}{25}} = \dfrac{\pi_{30,25}}{2} - \dfrac{b}{2\,\mathrm{N}_{30,25}} = {\cdot}015273 - {\cdot}001925 = {\cdot}013348$. The premium payable during the joint lives to insure £100 on the death of X, if it happen during the life of Y, is £1·720; and the premium to insure £100 on the death of Y during X's life is £1·335; by addition the two premiums are £3·055, which entitles the insurant to £100 on the death of the *first* life, be it X or Y.

$\Pi_{\overset{2}{30},25} = \Pi_{30} - \Pi_{\overset{1}{30},25} = {\cdot}41706 - {\cdot}28821 = {\cdot}12885$. The single premium to insure £100 on the death of X age 30, provided he die *second*, is £12·885.

$\Pi_{30,\overset{2}{25}} = \Pi_{25} - \Pi_{30,\overset{1}{25}} = {\cdot}37926 - {\cdot}22367 = {\cdot}15559$. The single premium to insure £100 on the death of Y age 25, provided she die *after* X, is £15·559.

By addition $\cdot12885 + \cdot15559 = \Pi_{\overline{x,y}} = \cdot28444$.

Reversionary Life Annuities.

$A_{y|x} = A_y - A_{xy}$ = value of reversionary annuity of £1 on life of Y after death of X.

$$\begin{aligned} A_{25} &= 21{\cdot}3120 \\ A_{30,\,25} &= \underline{16{\cdot}7587} \\ & \ 4{\cdot}5533 \end{aligned}$$

£455·33 is the value of a reversionary annuity of £100 on life of a woman aged 25, after the death of a man aged 30.

$$\pi'_{y|x} = \frac{A_y - A_{xy}}{A_{xy}} = \frac{A_y}{A_{xy}} - 1 = \frac{A_{y|x}}{A_{xy}} = \frac{A_{25}}{A_{30,\,25}} - 1$$

$$\begin{aligned} \lambda\, A_{25} &= 1{\cdot}3286241 \text{ (p. 85)} \\ \lambda\, A_{30,\,25} &= \underline{1{\cdot}2242391} \text{ (p. 192)} \end{aligned}$$

$$0{\cdot}1043850\,;\ \pi'_{30|25} = 1{\cdot}27170 - 1.$$

£27·170 is the annual premium payable during the joint life of X and Y to provide a survivorship annuity of £100 on the life of Y, to commence after death of X.

THREE LIVES; X AGED x, Y AGED y, AND Z AGED z.

$x = 20$ a male.
$y = 50$ a male.
$z = 90$ a male.

$$\lambda\, N_{xyz} - \lambda\, D_{xyz} = \lambda\, A_{xyz} = 0{\cdot}4781061\,;\ A_{xyz} = 3{\cdot}0068$$

A_{xyz} = value of an annuity of £1 on *three* joint lives of the above ages (interest 3 per cent.) = 3·0068.

$A_{\frac{2}{xyz}} = A_{xy} + A_{xz} + A_{yz} - 2\,A_{xyz}$ = the value of an annuity of £1 payable as long as any *two* out of three lives of the above ages survive.

$$\begin{aligned} \lambda\, N_{xy} - \lambda\, D_{xy} &= 1{\cdot}1173029\,;\ A_{xy} = 13{\cdot}1010 \\ \lambda\, N_{xz} - \lambda\, D_{xz} &= 0{\cdot}4950014\,;\ A_{xz} = 3{\cdot}1261 \\ \lambda\, N_{yz} - \lambda\, D_{yz} &= 0{\cdot}4848982\,;\ A_{yz} = 3{\cdot}0542 \\ & -6{\cdot}0136 = 3{\cdot}9864 - 10 = -2\,A_{xyz} \end{aligned}$$

$$A_{\frac{2}{xyz}} = 13{\cdot}2677$$

$A_{\overline{xyz}} = A_x + A_y + A_z - (A_{xy} + A_{xz} + A_{yz}) + A_{xyz}$ = the value of an annuity of £ 1 on the *longest* of *three* lives.

$$\begin{array}{rcl} A_x &=& 22\cdot0612 \\ A_y &=& 14\cdot4242 \\ A_z &=& 3\cdot1788 \end{array}\left.\vphantom{\begin{array}{c}1\\1\\1\end{array}}\right\}\text{(pp. 52–3)}$$

$$\begin{array}{rcl} A_{xyz} &=& 3\cdot0068 \\ A_{xy} + A_{xz} + A_{yz} &=& 80\cdot7187 - 100 = -19\cdot2813 \\ \hline A_{\overline{xyz}} &=& 23\cdot3897 \end{array}$$

$\Pi_{xyz} = 1 - dA_{xyz}$ = single premium to insure £ 1 payable at the *first* death.

$$\begin{array}{lll} A_{xyz} = 3\cdot0068 & 0\cdot4781061 & \\ \lambda\, d = & \bar{2}\cdot4642840 & \\ \hline \lambda(dA_{xyz}) = & \bar{2}\cdot9423901\,; & dA_{xyz} = \cdot08758 \\ & & \cdot91242 = 1 - dA_{xyz} = \Pi_{xyz} \end{array}$$

[*Note.*—In this and similar cases dA_{xyz} is the present value of the interest of £ 1 payable during the joint lives $= viA_{xyz}$.]

$\Pi_{\overset{2}{xyz}} = 1 - dA_{\overset{2}{xyz}}$ = single premium to insure £ 1 payable at the *second* death.

$$\begin{array}{lll} A_{\overset{2}{xyz}} = 13\cdot2677 & 1\cdot1227957 & \\ \lambda\, d = & \bar{2}\cdot4642840 & \\ \hline & 1\cdot5870797\,; & dA_{\overset{2}{xyz}} = \cdot38644 \\ & & \cdot61356 = 1 - dA_{\overset{2}{xyz}} = \Pi_{\overset{2}{xyz}} \end{array}$$

$\Pi_{\overline{xyz}} = 1 - dA_{\overline{xyz}}$ = single premium to insure £ 1 payable at the *third* death.

$$\begin{array}{lll} A_{\overline{xyz}} = 23\cdot3897 & 1\cdot3690247 & \\ \lambda\, d = & \bar{2}\cdot4642840 & \\ \hline & \bar{1}\cdot8333087\,; & dA_{\overline{xyz}} = \cdot68125 \\ & & \cdot31875 = 1 - dA_{\overline{xyz}} = \Pi_{\overline{xyz}} \end{array}$$

$\pi_{xyz} = a_{xyz} + v - 1$ = annual premium to be paid during the joint lives to insure £ 1 at the *first* death.

$$\begin{array}{lll} \lambda\, A_{xyz} = & 0\cdot4781061 & \\ \lambda\, a_{xyz} = & \bar{1}\cdot5218939\,; & a_{xyz} = \cdot332578 \\ v = & & \phantom{a_{xyz} =\ }\cdot970874 \\ \hline & & \phantom{a_{xyz} =\ }\cdot303452 = \pi_{xyz} \end{array}$$

$\pi^{\,2}_{\overline{xyz}} = a^{\,2}_{\overline{xyz}} + v - 1 =$ annual premium to be paid during the co-existence of any two lives out of the three to insure £1 at the *second* death.

$\lambda\, A^{\,2}_{\overline{xyz}} =$ 1·1227957

$\lambda\, a^{\,2}_{\overline{xyz}} =$ $\bar{2}$·8772043 ; $a^{\,2}_{\overline{xyz}} =$ ·075371

$v =$ ·970874

·046245 $= \pi^{\,2}_{\overline{xyz}}$

$\pi_{\overline{xyz}} = a_{\overline{xyz}} + v - 1 =$ annual premium to be paid during the longest of three lives to insure £1 at the end of the year of its extinction.

$A_{\overline{xyz}} =$ 23·3897 1·3690247

$\lambda\, a_{\overline{xyz}} =$ $\bar{2}$·6309753 ; $a_{\overline{xyz}} =$ ·042754

$v =$ ·970874

·013628 $= \pi_{\overline{xyz}}$

Annual Premium for Deferred Annuity.

Let the life be a male age 20; and the first payment of the annuity fall due at age 65.

$$\frac{N_{x+n}}{N_{x\,|\,n}} = \frac{N_{65}}{N_{20} - N_{65}}$$

$\lambda\, N_{65} = 5$·3107273

$\lambda\, (N_{20} - N_{65}) = 6$·5877590

$\bar{2}$·7229683 ; ·052840

Thus £5·284 is the annual premium payable by X age 20 to provide a deferred annuity of £100,—first payment should the life survive at age 65.

Deferred Annuity.—Annual Premiums returnable on Death occurring before the Age $x + n$.

$$\frac{N_{x+n}}{N_{x\,|\,n} - R_{x\,|\,n} + nM_{x+n}} = \frac{N_{65}}{N_{20\,|\,45} - R_{20\,|\,45} + 45\,M_{65}}$$

$N_{20\,|\,45} =$ 3,870,428 $\lambda\, N_{65} = 5$·3107273

$45\,M_{65} =$ 725,202   2,805,754   6·4480496

$10{,}000{,}000 + R_{65} - R_{20} =$ 8,210,124 $\bar{2}$·8626777   ·072892

1·1373223   13·719

$N_{20\,|\,45} + 45\,M_{65} - (R_{20} - R_{65}) =$ 2,805,754

£7·2892 is the annual premium to be paid by a man age 20 until he is 64 to entitle him to a deferred annuity of £100, first payment at age 65; and should he die before that age to a return of all the premiums he may have previously paid at the end of his death-year.

$$\frac{N_{x\,|\,n}}{N_{x+n}} = \frac{N_{20} - N_{65}}{N_{65}} = \frac{N_{20}}{N_{65}} - 1$$

$$\begin{array}{lrr} \lambda\, N_{20} & 6{\cdot}6101216 & \\ \lambda\, N_{65} & 5{\cdot}3107273 & \\ \hline & 1{\cdot}2993943 & 19{\cdot}925 \\ & & 1{\cdot}0 \\ \hline & & 18{\cdot}925 \end{array}$$

At the age 20, £1 is the annual premium to provide a deferred annuity of £18·925, first payment at 65; but £13·719 is the annuity which the same annual premium of £1 would provide, on condition that in the event of death before the age of 65 all the premiums received should be returned.

Temporary Insurance.

Annual premium to insure £1 for 5 years on two lives, X a male aged 30, and Y a female aged 25.

$$\pi_{xy,n} = \frac{D_{xy\,|\,n}}{N_{xy\,|\,n}} - d\ ;\ \text{and}\ \pi_{30,25;5} = \frac{D_{30,25} - D_{35,30}}{N_{30,25} - N_{35,30}} - d.$$

$$\begin{array}{lrrr} D_{30,25} - D_{35,30} = & 94{,}305 & 4{\cdot}9745347 & \\ N_{30,25} - N_{35,30} = & 1{,}928{,}466 & 6{\cdot}2852120 & \\ \hline & & \bar{2}{\cdot}6893227 & {\cdot}04890 \\ & & d = & {\cdot}02913 \\ \hline & & & {\cdot}01977 = \pi_{30,25;5} \end{array}$$

Insurance by continuous Payments of Premium.

Annual premium payable by daily, or weekly, or monthly instalments to insure on the life of X a male aged 30 £1 payable on the day of his death.

$$\pi'_x = \frac{M'_x}{Q'_x}\ ;\ \text{and}\ \pi'_{30} = \frac{M'_{30}}{Q'_{30}}$$

$$\lambda\, M'_{30} - \lambda\, Q'_{30} = \bar{2}{\cdot}3363753\ ;\ \pi'_{30} = {\cdot}02170$$

Thus, upon this Table £2·170 in annual premium insures £100; upon the common plan the annual premium is £2·084.

The following is a Summary of the Results of the previous Calculations.

Two Lives; X a Male aged 30, and Y a Female aged 25.

			£
1.	$A_{30,25}$	= The value of a joint life annuity of £100 on the two lives is	1675·87
2.	$a_{30,25}$	= The annuity on the two lives which £100 will purchase, first payment due, is	5·967

[*Note.*—The value of the annuity (No. 2.), first payment at the end of a year, is £94·033.]

£

3. $\Pi_{30,25}$ = Single Premium to insure £100, payable on the first death X or Y, is . . . . 51·188

4. $\pi_{30,25}$ = The same sum (£100) is insured by an annual premium of . . . . 3·055

5. $\Pi_{\overline{30,25}}$ = The single premium to insure £100 on the last death is . . . . 28·444

6. $A_{\overline{30,25}}$ = The present value of an annuity of £100 upon the longest life, first payment due, is . . . . . 2456·76

7. $\pi_{\overline{30,25}}$ = The annual premium payable during the longest life to insure £100, payable at the end of the year of its extinction, is . . . . . . 1·158

8. $\Pi_{\overset{1}{30},25}$ = The single premium to insure £100 on the death of X aged 30, provided it happen during the life of Y aged 25, is . . . . 28·821

9. $\Pi_{30,\overset{1}{25}}$ = The premium for the corresponding insurance on the life of Y is . . . . 22·367

[*Note.*—The sum of Nos. 8. and 9. = No. 3.]

10. $\pi_{\overset{1}{30},25}$ = The annual premium payable during the joint lives to insure £100 on the death of X, if it happen during the life of Y, is . . . . 1·720

11. $\pi_{30,\overset{1}{25}}$ = The premium for the corresponding insurance on the death of Y is . . . . 1·335

[*Note.*—The sum of Nos. 10. and 11. = No. 4.]

12. $\Pi_{\overset{2}{30},25}$ = The single premium to insure £100 on the death of X aged 30, provided he die second, is . . . . 12·885

13. $\Pi_{30,\overset{2}{25}}$ = The premium for the corresponding insurance on the life of Y, provided she die after X, is . . 15·559

[*Note.*—The sum of Nos. 12. and 13. = No. 5.]

Reversionary Annuities.

14. $A_{25|30}$ = Value of reversionary annuity of £100 on life of Y aged 25 after death of X aged 30 . . . . 455·33

15. $\pi'_{25|30}$ = Annual premium payable during the joint lives of X aged 30 and Y aged 25 to provide a survivorship annuity of £100 on life of Y to commence after the death of X . . . . 27·170

THREE MALE LIVES, X AGED 20, Y AGED 50, AND Z AGED 90. £

16. $A_{20,\,50,\,90}$ = Value of an annuity of £ 100 on the three joint lives 300·7

17. $A_{\overset{2}{\overline{20,\,50,\,90}}}$ = Value of an annuity of £ 100 payable as long as any *two* out of the three lives survive . . . . 1326·8

18. $A_{\overline{20,\,50,\,90}}$ = Value of an annuity of £ 100 on the *longest* of the three lives . . . . 2339·0

19. $\Pi_{20,\,50,\,90}$ = Single premium to insure £ 100 payable at the *first* death . . . . 91·242

20. $\Pi_{\overset{2}{\overline{20,\,50,\,90}}}$ = Single premium to insure £ 100 payable at the *second* death . . . . 61·356

21. $\Pi_{\overline{20,\,50,\,90}}$ = Single premium to insure £ 100 payable at the *third* death . . . . 31·875

22. $\pi_{20,\,50,\,90}$ = Annual premium to be paid during the joint lives to insure £ 100 at the *first* death . . . . 30·345

23. $\pi_{\overset{2}{\overline{20,\,50,\,90}}}$ = Annual premium to be paid during the co-existence of any two lives out of the three to insure £ 100 at the *second* death . . . . 4·625

24. $\pi_{\overline{20,\,50,\,90}}$ = Annual premium to be paid during the longest of three lives to insure £ 100 at the end of the year of its extinction . . . . 1·363

DEFERRED ANNUITY.

25. $\dfrac{N_{65}}{N_{20} - N_{65}}$ = Annual premium payable by X, a male aged 20, to provide a deferred annuity of £ 100 at age 65 . 5·284

[*Note.*—An annual premium of £ 1 will provide a deferred annuity of £ 18·925.]

26. $\dfrac{N_{65}}{N_{20\,|\,45} - R_{20\,|\,45} + 45\,M_{65}}$ = Annual premium payable by X, a male aged 20, to provide a deferred annuity of £ 100 at age 65; the premiums paid to be returnable if he die before that age . . . . 7·289

[*Note.*—An annual premium of £ 1 will provide a deferred annuity of £ 13·719 under the above conditions.]

TEMPORARY INSURANCE.

27. $\pi_{30,\,25;\,5}$ = Annual premium to insure £ 100 for five years on two lives, X a male aged 30 and Y a female aged 25 . 1·977

INSURANCE BY CONTINUOUS PAYMENTS OF PREMIUM.

28. π'_{30} = Annual premium payable by daily or weekly or monthly instalments to insure on the life of X, a male aged 30, £ 100 payable on the day of his death . . 2·170

APPENDIX.

SCHEUTZ'S CALCULATING MACHINE AND ITS USE IN THE CONSTRUCTION OF THE ENGLISH LIFE TABLE No. 3.

THE following description of the Calculating Machine was sent by the Registrar General to the Exhibition of 1862 for distribution, with specimens of its printed work, of stereotyped plates, and of papier-mâché moulds stamped by its printing apparatus.

The Registrar General would have been glad to send the Machine to be exhibited with the Difference Engine of Mr. Babbage; but it was then in use at the General Register Office, and it was a matter of great importance to complete the new Life Tables, for which there was an urgent demand. Upon other grounds the completion of the work was called for.

The first public money was advanced for the Difference Engine of Mr. Babbage in 1823, and it had been so far completed as to show beyond a doubt the practicability of the conception. His Engine was in the Exhibition of 1862; and the first Machine which the Scheutzes, father and son, constructed was exhibited and won the gold medal at the Exhibition of 1855 in Paris. The powers of the Swedish Machine* had been displayed in the production of thirty pages of five-figure logarithms for the numbers from 1,000 to 10,000†; but it had executed no original work of any extent. Now there are, besides the thousands of machines in the clouds of inventors' brains, many ingenious and beautiful machines in exhibitions of no practical use whatever. How can the spectator know whether they will execute genuine work at all? Who can detect their errors or compare the cost of their work with that of other work of the same kind? A watch to look at is sometimes not a watch to go, according to common observation. Which of these classes of works had we in hand? Here were calculating machines in which everybody was interested, which had existed in pieces or in the state of projects, in which money had been invested for nearly forty years, and which in the completed state had hitherto realized none of the expectations which the country naturally entertained; so it did seem that the time had come for substantial work rather than for exhibition and appeals even to legitimate curiosity.

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* This first Swedish Machine was bought by Mr. Rathbone, an American, and presented by him to the Dudley Observatory at Albany. No account has reached us of any work executed by it in America.

† Specimens of Tables calculated, stereo-moulded, and printed by machinery. Longmans, 1857.

The Machine consists of more than 4,000 pieces, and it is about ten hundred-weight.* It had been shaken out of order on its way from the Factory to Somerset House. It might have been injured or destroyed on its journey to or from the Exhibition, and no one would absolutely guarantee its safety there. Under these circumstances the Machine was not exhibited.

So this work was continued uninterruptedly at the General Register Office until it was completed; and I cannot agree with Mr. Babbage, who thinks that it could have been safely carried on in the midst of the crowds of the Exhibition, with incessant interruptions for explanation, and with the possible clang of musical instruments, discordant sounds, or noises in the ears of the operators.

The Machine required incessant attention. The differences had to be inserted at the proper terms of the various series, checking was required, and when the mechanism got out of order it had to be set right. Of the first watch nothing is known, but the first steam-engine was indisputably imperfect; and here we had to do with the second Calculating Machine as it came from the designs of its constructors and from the workshop of the engineer. The idea had been as beautifully embodied in metal by Mr. Bryan Donkin as it had been conceived by the genius of its inventors; but it was untried. So its work had to be watched with anxiety, and its arithmetical music had to be elicited by frequent tuning and skilful handling, in the quiet most congenial to such productions.

This volume is the result; and thus—if I may use the expression—the soul of the Machine is exhibited in a series of Tables which are submitted to the criticism of the consummate judges of this kind of work in England and in the world.

If their approving testimony be won, it will be some compensation to the "English workmen," the firm of Messrs. Donkin and the Messrs. Scheutz, for the loss of a medal at the Exhibition of 1862.

The Machine, I should add, was seen by many scientific men at the General Register Office during the Exhibition; and it was made known that it was accessible then, as it is now, to any accredited person, on application to the Registrar General.

General Register Office, W. FARR.
5th August 1864.

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* Mr. Bryan Donkin states that Scheutz's Calculating Machine consists of about 4,320 pieces, of which 2,054 are screws, 364 compose the chain, and 902 are other parts of the mechanism. The weight of the Machine (exclusive of case) is by his estimate about 10 cwt.

Pascal, Leibnitz, and other mathematicians conceived the idea of performing numerical operations mechanically; and Mr. Babbage invented a calculating machine, of which, for various reasons, he did not complete the construction. It was, however, lucidly described in the Edinburgh Review for July 1834 by Dr. Lardner. The article inspired Mr. Scheutz, a Swede, with enthusiasm in the cause, and he exclaimed, "I also will make a calculating machine." With his son, after many sacrifices, and many years of labour, he succeeded. The machine was brought to England, and its Inventors were received in the most friendly way by Mr. Babbage, who bore open testimony to the originality of the Swedes. A Committee of the Royal Society reported favourably on the machine, and it was exhibited in the rooms at Somerset House, where Mr. Gravatt, a Fellow of the Society, displayed its powers and uses to some of the principal scientific authorities of the kingdom. The machine won a gold medal for its Inventors at the French Exhibition, and was purchased by a liberal American for an Institution in the United States.

Mr. Babbage's account of the labours of the Inventors, and his son's description of the machine containing several hundred different pieces, in the lucid notation of his father, will be found full of interest and instruction. Those two papers, the Edinburgh Review, Weld's History of the Royal Society, the Preface to Scheutz's Specimen Tables, and the Report of the Committee of the Royal Society, give the history of the two machines.

Scheutz's machine had thus passed its preliminary examination satisfactorily.

At that time it appeared to be desirable to construct a new Life Table from the materials accumulated at the General Register Office by the registration of births and deaths in seventeen years (1838–1854), and by the two enumerations of the population of England and Wales in 1841 and 1851.* The Tables for single lives, and the various combinations of joint lives, male and female, involve a great deal of numerical computation; and as it was found that the calculations of the series, thrown into a form which is described elsewhere,† could be performed by the machine, the Registrar General was pleased to bring the matter under the notice of Sir George Lewis, then Secretary of State for the Home Department.

And in doing so he pointed out the importance which had been justly attached by the most eminent scientific men of the country, by Her Majesty's Government, and by Parliament, to the machine of Mr. Babbage, for which, though it had not been completed, 17,000*l.* of money had been granted, besides the money expended by Mr. Babbage himself.‡ Here was a machine in working order, suggested to its Inventors by the English machine, and which Mr. Scheutz and the Messrs. Donkin offered to construct, with several improvements, for 1,200*l.*, of which the interest at 5 per cent. was 60*l.* a year. The Astronomer Royal concurred with the Registrar General in advising Her Majesty's Government to order a new machine; and accordingly the contract was entered into, and a machine was constructed by the Messrs. Donkin from Mr. Scheutz's drawings, superior, as it was reported to the Registrar General, to the first machine.

In constructing a new machine of many pieces, to execute a great number of exact movements, several new tools were required, and the workmen had to be specially instructed. This involved expense, from which the Messrs. Donkin, however, did not shrink.

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* Deaths 6,470,720, with ages distinguished.

† Paper presented to the Royal Society, March 17, read April 7, 1859. See Transactions of that year.

‡ The following statement occurs in Mr. Babbage's "Passages from the Life of a Philosopher":—"As to "the expense actually incurred upon the first Difference Engine, that of the Government was about 17,000*l.* "On my own part and out of my own private resources I have sacrificed upon this and other works of "science upwards of 20,000*l.*" (p. 103.)

The machine has been extensively tried, and it has, upon the whole, answered every expectation. But it is a delicate instrument, and requires considerable skill in the manipulation. It consists of a multitude of pieces, and some of these occasionally get deranged, so as to print errors, which can, however, by a due system of checks, be almost invariably detected and rectified. It approaches infallibility in certain respects, but it is not infallible, except in very skilful hands. The weakest point of the machine is the printing apparatus, and that admits of evident improvement.

The machine calculates and prints series of a particular kind, and to the execution of these operations its utility is therefore limited. Its scope is less ambitious than the new analytical machine for which Mr. Babbage abandoned his first invention, as that machine seeks to embrace the whole field of analysis.*

The machine simply performs the operation of addition, but by various expedients the other arithmetical operations can be reduced to this elementary process. Thus the machine, by adding the arithmetical complement of a number to another, virtually produces the same result as by direct subtraction. For subtracting 0·0293838 from 9·8530811 we have 9·8236973. Now the arithmetical complement of 0·0293838, obtained by subtracting it from 10·0000000, is 9·9706162 ; so the machine adding this to the number gives the following result :

$$\begin{array}{r} 9{\cdot}8530811 \\ +\text{arithmetical complement of } 0{\cdot}0293838 = 9{\cdot}9706162 \\ \hline 19{\cdot}8236973 \end{array}$$

It is *ten* more than that obtained by direct subtraction ; and the machine *does not* print the *ten,* so it disappears from the result. *Subtraction* by this simple expedient is performed by the same operations as *addition ;* so by introducing logarithms and their complements, with proper Tables, multiplication and division are also reduced to the same operations as addition.

The calculations for the English Life Table are brought within the compass of the machine at the General Register Office by a method which we will now describe as plainly as possible, and which is based on that of finite differences discovered by Newton.

The machine will not calculate the series of double square numbers 1^4 ; 2^4 ; 3^4 ; 4^4 ; general term x^4 ; or 1, 18, 81, 256, 625, &c. directly by multiplication ; but if the differences of these numbers are taken four times, the fourth order of differences will be found constant. They run thus :

	(The Function.)				
x	$xxxx=x^4$	δ^1	δ^2	δ^3	δ^4
1	1	15	50	60	24
2	16	65	110	84	24
3	81	175	194	108	
4	256	369	302		
5	625	671			
6	1296				

There is a row of calculating wheels for the Function, and a row for each of the four orders of differences ; each wheel being figured 0, 1, 2, 3, 4, 5, 6, 7, 8, 9. These are set. And thus this series may be continued to any extent, by adding the constant numbers of δ^4 to those of δ^3 ; those under δ^3 to δ^2 ; those under δ^2 to δ^1 ; those under δ^1 to 1, 16, &c.

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* See a Paper in the Transactions of the British Association.

called the function, or the series of double squares. The machine performs all these additions, and stereoglyphs the series in a leaden or a papier-mâché mould, which serves for stereotyping.

To calculate Interest Tables a series of this kind is required; namely, 1 divided by 1·03, and the quotient again divided by 1·03, &c., so on 100 times. Thus the value of 1*l.* payable at the end of one year, of 1*l.* payable at the end of two years, of three years, four years, &c., is found, reckoning the interest of money at 3 per cent. Now the machine will not perform these divisions, and will not therefore give the numbers directly, but it will calculate the logarithms of these numbers by inserting 0·0000000,5000000 in the function wheels, and constantly adding to it δ^1=9·987162[7],7529484. The machine prints 0·0000000 ; 9·9871628 ; 9·9743256 ; and the other logarithms in pages 6 and 7 of the volume. It will be observed that the bracketed figure [7] is augmented by the machine, and becomes 8. In truth it is followed by a 7 ; and as 7·7 is nearer to 8·0 than to 7·0, the correction is necessary to make the approximation as near the truth as is possible, with seven decimals. By a very simple arrangement in the setting—that is, by substituting, as above, 5 for the eighth 0 from the decimal point in the first number of the function—the machine effects all the corrections usual in such cases ; thus, 7,0 ; 7,1 ; 7,2 ; 7,3 ; 7,4 are printed as 7, and 7,5 ; 7,6 ; 7,7 ; 7,8 ; 7,9 are printed 8 in the seventh decimal place.

The book of logarithms gives, in the corresponding numbers, the value of 1*l.* payable at the end of each year. Thus the value of £1·000 000 payable after the lapse of a year is, ·970,874*l.* ; payable after the lapse of 2 years, ·942,596*l.* ; payable after the lapse of 3 years, ·915,142*l.* ; and so on. The sum of 20 of these successive values is the value of an annuity certain for 20 years, and so on for any other number of years. The interest is here taken at 3 per cent. The values for other rates of interest are calculated in the same way by the machine.

There are many series, of which the fourth difference is not constant ; yet the error from the neglect of the subsequent orders of differences is so small, that the series is calculated correctly within required degrees of accuracy, by dividing the long series into periods. This is the case with logarithms, which from given sets of four orders of differences can be calculated by the machine.

Such also is the series of logarithms of the probabilities of living a year after any given age. The chance of living a year increases from birth to the age of 12, 13, or 14 ; and then it decreases at increasing rates, not like interest, however, in simple geometrical ratios, otherwise the series could be calculated by one order of logarithmic differences. Three orders of logarithmic differences are required ; and by making the logarithms of the probability of living a year the first order of differences, the other orders becoming the 2d, 3d, and 4th, we get the series of logarithms corresponding to the numbers out of a given number born, attaining each year of age. The machine has calculated a Table of this kind, showing the numbers living at the end of every quarter of a year of age.

By combining these series for males and females with the interest logarithmic series, and again with each other, the mean duration of life is determined, as well as the value of annuities on one or two lives of the same or of different ages. These Tables have been calculated by the machine, at certain rates of interest.

The art is to shape the formulas and the numerical operations so that they can be executed by the machine.

The following example arranged by Mr. Lewis of this Department displays the method of calculating the Column λl_x Males from the age 20 to 50, and gives some idea of the way in which the Machine has been rendered available in the production of this Volume of Tables.

Referring to the Table of Differences on the next page, it will be seen that the original Differences for the Male ages 20–50 are these :—

$$\begin{aligned} \text{Function} = \lambda l_{20} &= 5\cdot5232361{,}0000 \\ \lambda p_{20} = \delta^1 &= 9\cdot9963874{,}0000 \\ \delta^2 &= 9\cdot9999196{,}4155 \\ \delta^3 &= 0\cdot0000026{,}4330 \\ \delta^4 &= 9\cdot9999991{,}6530 \end{aligned}$$

but when they are ready for the machine they are arranged in the following order :

$$\begin{array}{llll} u_x & = \lambda l_{20} = & u_{20} = & 5\cdot5232361{,}5000 \\ \delta^1_{x-1} & = \lambda p_{19} = & \delta^1_{19} = & \left.\begin{array}{l} 9\cdot9964712{,}3645 \\ 9\cdot9999161{,}6355 \end{array}\right\} \text{These two differences are taken from those against age 19} \\ \delta^2_{x-1} & = & \delta^2_{19} = & \\ \delta^3_{x-2} & = & \delta^3_{18} = & \left.\begin{array}{l} 0\cdot0000043{,}1270 \\ 9\cdot9999991{,}6530 \end{array}\right\} \text{These two differences are taken from those against age 18} \\ \delta^4_{x-2} & = & \delta^4_{18} = & \end{array}$$

δ^4 being *constant* remains unchanged.

u_{20} is then placed upon the first or *Function* row of figure wheels in the machine, δ^1_{19} on the second row, δ^2_{19} on the third row, and so on.

The handle of the machine is then turned, and the effect of the first half-stroke is that the numbers on the third and fifth rows (δ^2 & δ^4) are added to those on the rows immediately above them (δ^1 & δ^3) ; the second half-stroke adds the *new* numbers on δ^1 & δ^3 to the numbers on the u_{20} and δ^2, and thus gives u_{21} as the result of a complete forward and backward motion of the machine.

The way in which the machine adds the differences together will be rendered more intelligible by the example here given :

Figure Wheels.	Machine as set.	After the forward motion.	After the backward motion.
1st row ...	u_{20} = 5·5232361,5000	5·5232361,5000	**5·5197135, 5000** = u_{21}
2d row ...	δ^1_{19} = 9·9964712,3645	**9·9963874,0000**	**9·9963874,0000** = δ^1_{20}
3d row ...	δ^2_{19} = 9·9999161,6355	9·9999161,6355	**9·9999196,4155** = δ^2_{20}
4th row ...	δ^3_{18} = 0·0000043,1270	**0·0000034,7800**	**0·0000034,7800** = δ^3_{19}
5th row ...	δ^4_{18} = 9·9999991,6530	9·9999991,6530	9·9999991,6530 = δ^4_{19}

All that is necessary, therefore, when the differences have been once transferred to the machine, is to turn the handle until the requisite number of values of u_x is obtained.

TABLE 1.—ENGLISH LIFE TABLE No. 3.—DIFFERENCES for interpolating the Logarithms of the Series l_x.

MALES.				FEMALES.			
ORIGINAL DIFFERENCES.		MACHINE DIFFERENCES.		ORIGINAL DIFFERENCES.		MACHINE DIFFERENCES.	
First Series; Ages 0 to 2 (inclusive).				First Series; Ages 0 to 2 (inclusive).			
		U_0	5·7090538,5000			U_0	5·6886465,5000
δ^1	9·9224164,0000	δ^1_{-1}	9·8381414,0000	δ^1	9·9371604,0000	δ^1_{-1}	9·8791136,0000
δ^2	0·0487213,0000	δ^2_{-1}	0·0842750,0000	δ^2	0·0350806,0000	δ^2_{-1}	0·0580468,0000
δ^3	9·9644463,0000	δ^3_{-2}	9·9644463,0000	δ^3	9·9770338,0000	δ^3_{-2}	9·9770338,0000
δ^4	0·0000000,0000	δ^4_{-2}	0·0000000,0000	δ^4	0·0000000,0000	δ^4_{-2}	0·0000000,0000
Second Series; Ages 3 to 6.				Second Series; Ages 3 to 6.			
δ^1	9·9895169,0000	δ^1_{-1}	9·9858742,0000	δ^1	9·9893710,0000	δ^1_{-1}	9·9853575,4167
δ^2	0·0026744,0000	δ^2_{-1}	0·0036427,0000	δ^2	0·0028813,0000	δ^2_{-1}	0·0040134,5833
δ^3	9·9991916,7000	δ^3_{-2}	9·9988717,3000	δ^3	9·9990614,3667	δ^3_{-2}	9·9986742,4667
δ^4	0·0001599,7000	δ^4_{-2}	0·0001599,7000	δ^4	0·0001935,9500	δ^4_{-2}	0·0001935,9500
Third Series; Ages 7 to 19.				Third Series; Ages 7 to 19.			
δ^1	9·9960044,0000	δ^1_{-1}	9·9951697,2323	δ^1	9·9960392,0000	δ^1_{-1}	9·9952729,9561
δ^2	0·0006668,2377	δ^2_{-1}	0·0008346,7677	δ^2	0·0006103,1262	δ^2_{-1}	0·0007662,0439
δ^3	9·9998453,5257	δ^3_{-2}	9·9998189,4143	δ^3	9·9998563,3596	δ^3_{-2}	9·9998318,8050
δ^4	0·0000132,0557	δ^4_{-2}	0·0000132,0557	δ^4	0·0000122,2773	δ^4_{-2}	0·0000122,2773
Fourth Series; Ages 20 to 50.				Fourth Series; Ages 20 to 53.			
δ^1	9·9963874,0000	δ^1_{-1}	9·9964712,3645	δ^1	9·9962646,0000	δ^1_{-1}	9·9963659,5390
δ^2	9·9999196,4155	δ^2_{-1}	9·9999161,6355	δ^2	9·9999024,8110	δ^2_{-1}	9·9998986,4610
δ^3	0·0000026,4330	δ^3_{-2}	0·0000043,1270	δ^3	0·0000033,6660	δ^3_{-2}	0·0000043,0340
δ^4	9·9999991,6530	δ^4_{-2}	9·9999991,6530	δ^4	9·9999995,3160	δ^4_{-2}	9·9999995,3160
Fifth Series; Ages 51 to 109.				Fifth Series; Ages 54 to 109.			
δ^1	9·9911289,3230	δ^1_{-1}	9·9915671,0000	δ^1	9·9913715,1440	δ^1_{-1}	9·9919360,8295
δ^2	9·9995551,0210	δ^2_{-1}	9·9995618,3230	δ^2	9·9994204,1685	δ^2_{-1}	9·9994354,3145
δ^3	9·9999829,4260	δ^3_{-2}	0·0000035,9700	δ^3	9·9999740,4550	δ^3_{-2}	9·9999959,2530
δ^4	9·9999896,7280	δ^4_{-2}	9·9999896,7280	δ^4	9·9999890,6010	δ^4_{-2}	9·9999890,6010

Note.—The differences used to interpolate the series λD_x ($= \lambda v^x l_x$) are the same as are used in the series λl_x, excepting that to δ^1_{-1} the logarithm of v for the various rates of interest is added: thus the $\delta^1_x = p_x v^1$ in every term of the series.

For the JOINT LIVES *half* the logarithm of v ($= \lambda v^{\frac{1}{2}}$) is added to δ^1_{-1} of the λl_x series, the differences of the other orders remaining unaltered. The Male and Female Table and the Two-Male Table are interpolated by means of the differences of the series λl_x for males, and the Two-Female Table by the differences of the series λl_x for females.

TABLE 2.—BINOMIAL CO-EFFICIENTS for POSITIVE and INTEGRAL EXPONENTS.

Binomial Exponent. n	**Number of Binomial Term.**						
	1	**2**	**3**	**4**	**5**	**6**	**7**
		Combinations m by m out of n things.					
		$m=1$	2	3	4	5	$6=m$
0	1	...	...	...	...	...	...
1	1	1	...	...	...	...	...
2	1	2	1	...	...	...	...
3	1	3	3	1	...	...	...
4	1	4	6	4	1	...	...
5	1	5	10	10	5	1	...
6	1	6	15	20	15	6	1
7	1	7	21	35	35	21	7
8	1	8	28	56	70	56	28
9	1	9	36	84	126	126	84
10	1	10	45	120	210	252	210
11	1	11	55	165	330	462	462
12	1	12	66	220	495	792	924
13	1	13	78	286	715	1,287	1,716
14	1	14	91	364	1,001	2,002	3,003
15	1	15	105	455	1,365	3,003	5,005
16	1	16	120	560	1,820	4,368	8,008
17	1	17	136	680	2,380	6,188	12,376
18	1	18	153	816	3,060	8,568	18,564
19	1	19	171	969	3,876	11,628	27,132
20	1	20	190	1,140	4,845	15,504	38,760
21	1	21	210	1,330	5,985	20,349	54,264
22	1	22	231	1,540	7,315	26,334	74,613
23	1	23	253	1,771	8,855	33,649	100,947
24	1	24	276	2,024	10,626	42,504	134,596
25	1	25	300	2,300	12,650	53,130	177,100
26	1	26	325	2,600	14,950	65,780	230,230
27	1	27	351	2,925	17,550	80,730	296,010
28	1	28	378	3,276	20,475	98,280	376,740
29	1	29	406	3,654	23,751	118,755	475,020
30	1	30	435	4,060	27,405	142,506	593,775
31	1	31	465	4,495	31,465	169,911	736,281
32	1	32	496	4,960	35,960	201,376	906,192
33	1	33	528	5,456	40,920	237,336	1,107,568
34	1	34	561	5,984	46,376	278,256	1,344,904
35	1	35	595	6,545	52,360	324,632	1,623,160
36	1	36	630	7,140	58,905	376,992	1,947,792
37	1	37	666	7,770	66,045	435,897	2,324,784
38	1	38	703	8,436	73,815	501,942	2,760,681
39	1	39	741	9,139	82,251	575,757	3,262,623
40	1	40	780	9,880	91,390	658,008	3,838,380
41	1	41	820	10,660	101,270	749,398	4,496,388
42	1	42	861	11,480	111,930	850,668	5,245,786
43	1	43	903	12,341	123,410	962,598	6,096,454
44	1	44	946	13,244	135,751	1,086,008	7,059,052
45	1	45	990	14,190	148,995	1,221,759	8,145,060
46	1	46	1,035	15,180	163,185	1,370,754	9,366,819
47	1	47	1,081	16,215	178,365	1,533,939	10,737,573
48	1	48	1,128	17,296	194,580	1,712,304	12,271,512
49	1	49	1,176	18,424	211,876	1,906,884	13,983,816

General Formula :—When n is any positive and integral number less than 101 the Table supplies the Co-efficients.

$$(a+b)^n = a^n + \frac{n}{1} \cdot a^{n-1} b + \frac{n\,(n-1)}{1 \cdot 2} \cdot a^{n-2} b^2 + \frac{n\,(n-1)\,(n-2)}{1.2.3} \cdot a^{n-3} b^3 \; . \; . \; . \; . \; . \; . \; . \; .$$

TABLE 2.—BINOMIAL CO-EFFICIENTS for POSITIVE and INTEGRAL EXPONENTS—*Continued.*

Binomial Exponent.	**Number of Binomial Term.**						
	1	**2**	**3**	**4**	**5**	**6**	**7**
		Combinations m by m out of n things.					
n		$m=1$	2	3	4	5	$6=m$
50	1	50	1,225	19,600	230,300	2,118,760	15,890,700
51	1	51	1,275	20,825	249,900	2,349,060	18,009,460
52	1	52	1,326	22,100	270,725	2,598,960	20,358,520
53	1	53	1,378	23,426	292,825	2,869,685	22,957,480
54	1	54	1,431	24,804	316,251	3,162,510	25,827,165
55	1	55	1,485	26,235	341,055	3,478,761	28,989,675
56	1	56	1,540	27,720	367,290	3,819,816	32,468,436
57	1	57	1,596	29,260	395,010	4,187,106	36,288,252
58	1	58	1,653	30,856	424,270	4,582,116	40,475,358
59	1	59	1,711	32,509	455,126	5,006,386	45,057,474
60	1	60	1,770	34,220	487,635	5,461,512	50,063,860
61	1	61	1,830	35,990	521,855	5,949,147	55,525,372
62	1	62	1,891	37,820	557,845	6,471,002	61,474,519
63	1	63	1,953	39,711	595,665	7,028,847	67,945,521
64	1	64	2,016	41,664	635,376	7,624,512	74,974,368
65	1	65	2,080	43,680	677,040	8,259,888	82,598,880
66	1	66	2,145	45,760	720,720	8,936,928	90,858,768
67	1	67	2,211	47,905	766,480	9,657,648	99,795,696
68	1	68	2,278	50,116	814,385	10,424,128	109,453,344
69	1	69	2,346	52,394	864,501	11,238,513	119,877,472
70	1	70	2,415	54,740	916,895	12,103,014	131,115,985
71	1	71	2,485	57,155	971,635	13,019,909	143,218,999
72	1	72	2,556	59,640	1,028,790	13,991,544	156,238,908
73	1	73	2,628	62,196	1,088,430	15,020,334	170,230,452
74	1	74	2,701	64,824	1,150,626	16,108,764	185,250,786
75	1	75	2,775	67,525	1,215,450	17,259,390	201,359,550
76	1	76	2,850	70,300	1,282,975	18,474,840	218,618,940
77	1	77	2,926	73,150	1,353,275	19,757,815	237,093,780
78	1	78	3,003	76,076	1,426,425	21,111,090	256,851,595
79	1	79	3,081	79,079	1,502,501	22,537,515	277,962,685
80	1	80	3,160	82,160	1,581,580	24,040,016	300,500,200
81	1	81	3,240	85,320	1,663,740	25,621,596	324,540,216
82	1	82	3,321	88,560	1,749,060	27,285,336	350,161,812
83	1	83	3,403	91,881	1,837,620	29,034,396	377,447,148
84	1	84	3,486	95,284	1,929,501	30,872,016	406,481,544
85	1	85	3,570	98,770	2,024,785	32,801,517	437,353,560
86	1	86	3,655	102,340	2,123,555	34,826,302	470,155,077
87	1	87	3,741	105,995	2,225,895	36,949,857	504,981,379
88	1	88	3,828	109,736	2,331,890	39,175,752	541,931,236
89	1	89	3,916	113,564	2,441,626	41,507,642	581,106,988
90	1	90	4,005	117,480	2,555,190	43,949,268	622,614,630
91	1	91	4,095	121,485	2,672,670	46,504,458	666,563,898
92	1	92	4,186	125,580	2,794,155	49,177,128	713,068,356
93	1	93	4,278	129,766	2,919,735	51,971,283	762,245,484
94	1	94	4,371	134,044	3,049,501	54,891,018	814,216,767
95	1	95	4,465	138,415	3,183,545	57,940,519	869,107,785
96	1	96	4,560	142,880	3,321,960	61,124,064	927,048,304
97	1	97	4,656	147,440	3,464,840	64,446,024	988,172,368
98	1	98	4,753	152,096	3,612,280	67,910,864	1,052,618,392
99	1	99	4,851	156,849	3,764,376	71,523,144	1,120,529,256
100	1	100	4,950	161,700	3,921,225	75,287,520	1,192,052,400

$\frac{n\,(n-1)}{1\cdot 2}$ = combinations of n things two by two : thus there are $\frac{4\cdot 3}{1\cdot 2} = 6$ combinations possible of *four* things, two by two.

$\frac{n\,(n-1)\,(n-2)\,(n-3)}{1\,.\,2\,.\,3\,.\,4} = \frac{6\,.\,5\,.\,4\,.\,3}{1\,.\,2\,.\,3\,.\,4} = 15$ = combinations possible of *six* things, four by four.

TABLE 3.—YEARLY TABLE :—MALES and FEMALES.

Logarithms of the Series d_x.

MALES.				FEMALES.			
Age (x)	$\lambda\, d_x$	**Age** (x)	$\lambda\, d_x$	**Age** (x)	$\lambda\, d_x$	**Age** (x)	$\lambda\, d_x$
0	4·9228240	55	3·7113010	0	4·8180543	55	3·6472851
1	4·4396642	56	3·7227162	1	4·4176211	56	3·6653934
2	4·1527469	57	3·7346398	2	4·1468409	57	3·6827766
3	3·9644011	58	3·7469454	3	3·9658130	58	3·6997510
4	3·8273046	59	3·7598189	4	3·8192806	59	3·7165042
5	3·7018269	60	3·7729815	5	3·6871721	60	3·7331170
6	3·5969268	61	3·7866095	6	3·5814945	61	3·7496590
7	3·5198280	62	3·8003046	7	3·5117497	62	3·7660409
8	3·4367985	63	3·8139144	8	3·4352071	63	3·7822576
9	3·3611610	64	3·8273693	9	3·3669830	64	3·7980979
10	3·2973227	65	3·8401688	10	3·3106933	65	3·8135143
11	3·2494430	66	3·8521749	11	3·2697464	66	3·8280796
12	3·2216750	67	3·8631443	12	3·2467447	67	3·8417973
13	3·2140487	68	3·8726224	13	3·2417954	68	3·8542453
14	3·2250507	69	3·8804134	14	3·2526103	69	3·8652225
15	3·2506639	70	3·8862086	15	3·2760020	70	3·8744238
16	3·2851070	71	3·8896378	16	3·3072820	71	3·8815558
17	3·3246939	72	3·8904210	17	3·3434086	72	3·8863779
18	3·3654880	73	3·8883480	18	3·3802112	73	3·8885165
19	3·4050047	74	3·8830365	19	3·4164741	74	3·8878423
20	3·4415380	75	3·8740757	20	3·4500951	75	3·8838317
21	3·4473131	76	3·8614149	21	3·4574277	76	3·8762756
22	3·4527062	77	3·8444772	22	3·4641914	77	3·8650447
23	3·4575791	78	3·8231481	23	3·4701164	78	3·8494808
24	3·4619485	79	3·7969904	24	3·4755259	79	3·8296254
25	3·4662743	80	3·7658175	25	3·4805818	80	3·8049568
26	3·4704105	81	3·7292458	26	3·4850112	81	3·7751734
27	3·4743620	82	3·6868150	27	3·4891144	82	3·7400467
28	3·4784222	83	3·6383894	28	3·4930396	83	3·6992305
29	3·4825878	84	3·5836521	29	3·4966529	84	3·6522463
30	3·4868554	85	3·5221833	30	3·5000992	85	3·5990092
31	3·4913617	86	3·4533183	31	3·5033821	86	3·5388250
32	3·4960990	87	3·3773063	32	3·5063697	87	3·4715851
33	3·5011962	88	3·2933626	33	3·5096057	88	3·3968964
34	3·5066403	89	3·2013971	34	3·5125510	89	3·3144992
35	3·5124175	90	3·1003705	35	3·5157414	90	3·2234959
36	3·5185139	91	2·9907827	36	3·5186455	91	3·1241781
37	3·5253040	92	2·8715729	37	3·5219222	92	3·0157788
38	3·5322446	93	2·7427251	38	3·5250448	93	2·8976271
39	3·5397032	94	2·6031444	39	3·5284024	94	2·7693773
40	3·5476517	95	2·4548449	40	3·5317343	95	2·6314438
41	3·5558197	96	2·2922561	41	3·5354207	96	2·4828736
42	3·5644293	97	2·1205739	42	3·5389506	97	2·3222193
43	3·5735678	98	1·9344985	43	3·5428254	98	2·1522883
44	3·5827450	99	1·7403627	44	3·5467894	99	1·9637878
45	3·5923988	100	1·5185139	45	3·5508396	100	1·7708520
46	3·6021686	101	1·3222193	46	3·5552154	101	1·5563025
47	3·6122539	102	1·0413927	47	3·5595476	102	1·3424227
48	3·6224213	103	0·8450980	48	3·5640740	103	1·0791812
49	3·6326597	104	0·4771213	49	3·5687882	104	0·8450980
50	3·6429589	105	0·3010300	50	3·5735678	105	0·6020600
51	3·6652056	106	0·0000000	51	3·5784100	106	0·3010300
52	3·6774244	107	...	52	3·5834255	107	0·0000000
53	3·6888646	108	...	53	3·5883838	108	...
54	3·7000977	109	...	54	3·6279800	109	...

TABLE 4.—For calculating the VALUE of PREMIUMS paid *continuously*, or at short intervals, through the Year, during Life, and of POLICIES payable at Death.

MALES :—Interest 3 per Cent.

Age	Continuous Payments.		Payments at Death.		**Age**	Continuous Payments.		Payments at Death.	
(x)	P'_x	Q'_x	C'_x	M'_x	(x)	P'_x	Q'_x	C'_x	M'_x
0	446,007	9,521,583	82,499·8	229,695·8	55	40,134	505,136	997·4	26,299·5
1	394,174	9,075,576	26,330·3	147,196·0	56	37,984	465,002	994·2	25,302·1
2	364,390	8,681,402	13,203·9	120,865·7	57	35,900	427,018	992·1	24,307·9
3	343,873	8,317,012	8,308·4	107,661·8	58	33,877	391,118	990·9	23,315·8
4	326,983	7,973,139	5,882·8	99,353·4	59	31,914	357,241	990·9	22,324·9
5	312,539	7,646,156	4,278·3	93,470·6	60	30,008	325,327	991·7	21,334·0
6	299,781	7,333,617	3,262·4	89,192·3	61	28,156	295,319	993·5	20,342·3
7	288,158	7,033,836	2,652·1	85,929·9	62	26,356	267,163	995·5	19,348·8
8	277,429	6,745,678	2,126·8	83,277·8	63	24,607	240,807	997·2	18,353·3
9	267,461	6,468,249	1,734·8	81,151·0	64	22,907	216,200	998·7	17,356·1
10	258,112	6,200,788	1,454·0	79,416·2	65	21,255	193,293	998·6	16,357·4
11	249,265	5,942,676	1,264·3	77,962·2	66	19,653	172,038	996·7	15,358·8
12	240,823	5,693,411	1,151·5	76,697·9	67	18,100	152,385	992·4	14,362·1
13	232,707	5,452,588	1,098·5	75,546·4	68	16,599	134,285	984·7	13,369·7
14	224,854	5,219,881	1,093·9	74,447·9	69	15,150	117,686	973·4	12,385·0
15	217,215	4,995,027	1,126·5	73,354·0	70	13,757	102,536	957·7	11,411·6
16	209,753	4,777,812	1,184·0	72,227·5	71	12,422	88,779	937·2	10,453·9
17	202,441	4,568,059	1,259·2	71,043·5	72	11,149	76,357	911·5	9,516·7
18	195,263	4,365,618	1,342·9	69,784·3	73	9,940	65,208	880·8	8,605·2
19	188,211	4,170,355	1,428·0	68,441·4	74	8,800	55,268	844·7	7,724·4
20	181,269	3,982,144	1,508·1	67,013·4	75	7,731	46,468	803·4	6,879·7
21	174,515	3,800,875	1,483·7	65,505·3	76	6,736	38,737	757·6	6,076·3
22	167,983	3,626,360	1,458·5	64,021·6	77	5,818	32,001	707·4	5,318·7
23	161,666	3,458,377	1,432·0	62,563·1	78	4,978	26,183	653·8	4,611·3
24	155,560	3,296,711	1,404·4	61,131·1	79	4,216	21,205	597·7	3,957·5
25	149,658	3,141,151	1,377·1	59,726·7	80	3,532	16,989	540·1	3,359·8
26	143,956	2,991,493	1,349·8	58,349·6	81	2,926	13,457	482·0	2,819·7
27	138,447	2,847,537	1,322·5	56,999·8	82	2,394	10,531	424·4	2,337·7
28	133,124	2,709,090	1,296·0	55,677·3	83	1,934	8,137	368·6	1,913·3
29	127,983	2,575,966	1,270·4	54,381·3	84	1,541	6,203	315·5	1,544·7
30	123,016	2,447,983	1,245·6	53,110·9	85	1,210	4,662	265·9	1,229·2
31	118,217	2,324,967	1,221·9	51,865·3	86	936	3,452	220·3	963·3
32	113,581	2,206,750	1,199·3	50,643·4	87	712	2,516	179·5	743·0
33	109,102	2,093,169	1,178·1	49,444·1	88	533	1,804	143·7	563·5
34	104,773	1,984,067	1,158·3	48,266·0	89	392	1,271	112·9	419·8
35	100,590	1,879,294	1,139·6	47,107·7	90	283	879	86·8	306·9
36	96,546	1,778,704	1,122·0	45,968·1	91	200	596	65·5	220·1
37	92,636	1,682,158	1,106·5	44,846·1	92	139	396	48·3	154·6
38	88,855	1,589,522	1,091·6	43,739·6	93	94	257	34·9	106·3
39	85,198	1,500,667	1,078·2	42,648·0	94	62	163	24·6	71·4
40	81,661	1,415,469	1,066·1	41,569·8	95	40	101	16·9	46·8
41	78,238	1,333,808	1,054·7	40,503·7	96	25	61	11·3	29·9
42	74,925	1,255,570	1,044·5	39,449·0	97	16	36	7·4	18·6
43	71,718	1,180,645	1,035·6	38,404·5	98	9	20	4·7	11·2
44	68,613	1,108,927	1,026·9	37,368·9	99	5	11	2·9	6·5
45	65,606	1,040,314	1,019·4	36,342·0	100	3	6	1·7	3·6
46	62,695	974,708	1,012·2	35,322·6	101	2	3	1·0	1·9
47	59,874	912,013	1,005·8	34,310·4	102	1	1	·5	·9
48	57,142	852,139	999·7	33,304·6	103	...	...	·3	·4
49	54,496	794,997	993·7	32,304·9	104	...	...	·1	·1
50	51,933	740,501	987·9	31,311·2					
51	49,436	688,568	1,009·6	30,323·3					
52	47,002	639,132	1,008·1	29,313·7					
53	44,641	592,130	1,004·9	28,305·6					
54	42,353	547,489	1,001·2	27,300·7					

$Q'_x = P'_x + P'_{x+1} + P'_{x+2}$ - - - - - - - - - $+ P'_{x+102}$

$M'_x = C'_x + C'_{x+1} + C'_{x+2}$ - - - - - - - - - $+ C'_{x+104}$

TABLE 5.—LOGARITHMS for calculating the VALUE of PREMIUMS paid *continuously*, or at short intervals, through the year, during Life, and of POLICIES payable at Death.

MALES :—Interest 3 per Cent.

Age	Continuous Payments.		Payments at Death.	
(x)	λ P'_x	λ Q'_x	λ C'_x	λ M'_x
0	5·6493413	6·9787091	4·9164528	5·3611531
1	5·5956875	6·9578742	4·4204558	5·1678960
2	5·5615662	6·9385899	4·1207012	5·0823031
3	5·5363977	6·9199673	3·9195182	5·0320616
4	5·5145256	6·9016294	3·7695845	4·9971828
5	5·4949038	6·8834432	3·6312696	4·9706750
6	5·4768038	6·8653182	3·5135322	4·9503274
7	5·4596307	6·8471923	3·4235962	4·9341443
8	5·4431515	6·8290256	3·3277295	4·9205293
9	5·4272601	6·8107867	3·2392548	4·9092939
10	5·4118084	6·7924469	3·1625792	4·8999091
11	5·3966618	6·7739820	3·1018623	4·8918841
12	5·3816985	6·7553726	3·0612571	4·8847834
13	5·3668102	6·7366026	3·0407936	4·8782138
14	5·3519014	6·7176606	3·0389583	4·8718524
15	5·3368903	6·6985378	3·0517343	4·8654238
16	5·3217082	6·6792291	3·0733402	4·8587026
17	5·3062992	6·6597318	3·1000899	4·8515244
18	5·2906210	6·6400457	3·1280467	4·8437578
19	5·2746446	6·6201730	3·1547262	4·8353189
20	5·2583244	6·6001170	3·1784223	4·8261617
21	5·2418340	6·5798836	3·1713602	4·8162765
22	5·2252646	6·5594709	3·1639160	4·8063265
23	5·2086186	6·5388724	3·1559517	4·7963183
24	5·1918973	6·5180808	3·1474839	4·7862622
25	5·1751012	6·4970888	3·1389725	4·7761685
26	5·1582300	6·4758880	3·1302714	4·7660379
27	5·1412827	6·4544694	3·1213857	4·7558734
28	5·1242574	6·4328234	3·1126087	4·7456781
29	5·1071511	6·4109401	3·1039371	4·7354496
30	5·0899603	6·3888084	3·0953674	4·7251837
31	5·0726806	6·3664168	3·0870365	4·7148769
32	5·0553067	6·3437532	3·0789366	4·7045228
33	5·0378324	6·3208043	3·0711966	4·6941145
34	5·0202507	6·2975563	3·0638034	4·6836413
35	5·0025541	6·2739947	3·0567434	4·6730919
36	4·9847336	6·2501037	3·0500026	4·6624566
37	4·9667800	6·2258668	3·0439555	4·6517247
38	4·9486829	6·2012666	3·0380588	4·6408748
39	4·9304312	6·1762843	3·0326802	4·6298987
40	4·9120129	6·1509004	3·0277915	4·6187779
41	4·8934153	6·1250933	3·0231223	4·6074947
42	4·8746245	6·0988409	3·0188946	4·5960360
43	4·8556264	6·0721193	3·0151959	4·5843822
44	4·8364055	6·0449029	3·0115359	4·5725103
45	4·8169457	6·0171645	3·0083525	4·5604088
46	4·7972299	5·9888745	3·0052850	4·5480527
47	4·7772405	5·9600010	3·0025331	4·5354258
48	4·7569588	5·9305105	2·9998633	4·5225042
49	4·7363652	5·9003655	2·9972645	4·5092684
50	4·7154395	5·8695257	2·9947264	4·4956997
51	4·6940463	5·8379468	3·0041359	4·4817765
52	4·6721171	5·8055906	3·0035175	4·4670707
53	4·6497357	5·7724171	3·0021205	4·4518724
54	4·6268799	5·7383754	3·0005163	4·4361738
55	4·6035173	5·7034084	2·9988824	4·4199475
56	4·5796049	5·6674549	2·9974604	4·4031566
57	4·5550895	5·6304462	2·9965468	4·3857474
58	4·5299075	5·5923078	2·9960151	4·3676503
59	4·5039852	5·5529613	2·9960514	4·3487896
60	4·4772384	5·5123201	2·9963768	4·3290723
61	4·4495725	5·4702914	2·9971676	4·3084000
62	4·4208826	5·4267763	2·9980254	4·2866540
63	4·3910537	5·3816691	2·9987980	4·2637142
64	4·3599603	5·3348557	2·9994157	4·2394521
65	4·3274665	5·2862162	2·9993780	4·2137143
66	4·2934260	5·2356244	2·9985468	4·1863573
67	4·2576827	5·1829423	2·9966790	4·1572179
68	4·2200695	5·1280275	2·9933199	4·1261217
69	4·1804094	5·0707248	2·9882737	4·0928960
70	4·1385149	5·0108764	2·9812316	4·0573466
71	4·0941882	4·9483102	2·9718236	4·0192784
72	4·0472213	4·8828489	2·9597696	3·9784864
73	3·9973956	4·8143009	2·9448594	3·9347610
74	3·9444823	4·7424737	2·9267106	3·8878648
75	3·8882426	4·6671540	2·9049126	3·8375695
76	3·8284269	4·5881260	2·8794146	3·7836392
77	3·7647754	4·5051635	2·8496397	3·7258055
78	3·6970180	4·4180194	2·8154733	3·6638234
79	3·6248746	4·3264383	2·7764786	3·5974209
80	3·5480540	4·2301678	2·7324683	3·5263134
81	3·4662555	4·1289483	2·6830594	3·4502029
82	3·3791675	4·0224696	2·6277913	3·3687888
83	3·2864686	3·9104643	2·5665285	3·2817831
84	3·1878265	3·7926018	2·4989540	3·1888441
85	3·0828989	3·6685723	2·4246480	3·0896226
86	2·9713331	3·5380708	2·3429458	2·9837616
87	2·8527660	3·4007106	2·2540965	2·8709888
88	2·7268244	3·2562365	2·1573156	2·7508939
89	2·5931246	3·1041456	2·0525129	2·6230424
90	2·4512726	2·9439889	1·9386491	2·4869969
91	2·3008640	2·7752463	1·8162240	2·3426200
92	2·1414842	2·5976952	1·6841770	2·1892095
93	1·9727082	2·4099331	1·5424920	2·0265333
94	1·7941007	2·2121876	1·3900741	1·8536982
95	1·6052160	2·0043214	1·2289373	1·6702459
96	1·4055983	1·7853298	1·0535113	1·4756712
97	1·1947812	1·5563025	0·8689919	1·2695129
98	0·9722881	1·3010300	0·6700793	1·0492180
99	0·7376320	1·0413927	0·4631062	0·8129134
100	0·4903157	0·7781513	0·2284202	0·5563025
101	0·2298316	0·4771213	0·0192884	0·2787536
102	$\bar{1}$·9556617	0·0000000	$\bar{1}$·7256246	$\bar{1}$·9542425
103	...	...	$\bar{1}$·5164926	$\bar{1}$·6020600
104	...	...	$\bar{1}$·1356787	$\bar{1}$·0000000

Note.—By adding the logarithm of 2 to λ C'_x and to λ M'_x, the logarithms of a Table are obtained, which expresses the probable amount of *sickness* out of the Populations P'_x and Q'_x.

TABLE 6.—The PROBABLE LIFETIME (*Vie probable*) and the AFTERLIFETIME (*Vie moyenne*).

AGE.	PROBABLE LIFETIME.		AFTERLIFETIME.		AGE.	PROBABLE LIFETIME.		AFTERLIFETIME.	
	T_x		E_x			T_x		E_x	
(x)	Males.	Females.	Males.	Females.	(x)	Males.	Females.	Males.	Females.
0	44·43	46·42	39·91	41·85	50	19·71	21·08	19·54	20·75
1	53·11	54·08	46·65	47·31	51	18·99	20·32	18·90	20·09
2	54·78	55·90	48·83	49·40	52	18·30	19·57	18·28	19·42
3	55·10	56·29	49·61	50·20	53	17·60	18·82	17·67	18·75
4	54·92	56·18	49·81	50·43	54	16·92	18·08	17·06	18·08
5	54·51	55·79	49·71	50·33	55	16·25	17·35	16·45	17·43
6	53·95	55·23	49·39	50·00	56	15·58	16·64	15·86	16·79
7	53·28	54·57	48·92	49·53	57	14·92	15·94	15·26	16·17
8	52·56	53·85	48·37	48·98	58	14·27	15·25	14·68	15·55
9	51·79	53·09	47·74	48·35	59	13·63	14·58	14·10	14·94
10	50·98	52·29	47·05	47·67	60	13·00	13·91	13·53	14·34
11	50·15	51·47	46·31	46·95	61	12·38	13·26	12·96	13·75
12	49·29	50·63	45·54	46·20	62	11·78	12·63	12·41	13·17
13	48·43	49·78	44·76	45·44	63	11·19	12·01	11·87	12·60
14	47·56	48·93	43·97	44·66	64	10·61	11·40	11·34	12·05
15	46·70	48·08	43·18	43·90	65	10·05	10·81	10·82	11·51
16	45·84	47·23	42·40	43·14	66	9·52	10·24	10·32	10·98
17	45·00	46·40	41·64	42·40	67	8·99	9·69	9·83	10·47
18	44·17	45·58	40·90	41·67	68	8·49	9·15	9·36	9·97
19	43·35	44·78	40·17	40·97	69	8·01	8·64	8·90	9·48
20	42·55	44·00	39·48	40·29	70	7·55	8·15	8·45	9·02
21	41·77	43·22	38·80	39·63	71	7·10	7·68	8·03	8·57
22	40·99	42·45	38·13	38·98	72	6·69	7·23	7·62	8·13
23	40·21	41·68	37·46	38·33	73	6·29	6·79	7·22	7·71
24	39·43	40·92	36·79	37·68	74	5·91	6·39	6·85	7·31
25	38·66	40·15	36·12	37·04	75	5·55	5·99	6·49	6·93
26	37·88	39·38	35·44	36·39	76	5·21	5·64	6·15	6·56
27	37·10	38·62	34·77	35·75	77	4·89	5·29	5·82	6·21
28	36·32	37·85	34·10	35·10	78	4·60	4·96	5·51	5·88
29	35·55	37·09	33·43	34·46	79	4·32	4·66	5·21	5·56
30	34·77	36·32	32·76	33·81	80	4·04	4·37	4·93	5·26
31	34·00	35·56	32·09	33·17	81	3·80	4·09	4·66	4·98
32	33·23	34·79	31·42	32·53	82	3·58	3·84	4·41	4·71
33	32·45	34·03	30·74	31·88	83	3·36	3·61	4·17	4·45
34	31·68	33·26	30·07	31·23	84	3·15	3·39	3·95	4·21
35	30·91	32·50	29·40	30·59	85	2·95	3·18	3·73	3·98
36	30·15	31·73	28·73	29·94	86	2·79	2·98	3·53	3·76
37	29·38	30·97	28·06	29·29	87	2·63	2·81	3·34	3·56
38	28·61	30·21	27·39	28·64	88	2·48	2·65	3·16	3·36
39	27·85	29·44	26·72	27·99	89	2·34	2·50	3·00	3·18
40	27·09	28·68	26·06	27·34	90	2·20	2·35	2·84	3·01
41	26·34	27·91	25·39	26·69	91	2·06	2·21	2·69	2·85
42	25·58	27·15	24·73	26·03	92	1·94	2·07	2·55	2·70
43	24·83	26·39	24·07	25·38	93	1·85	1·95	2·41	2·55
44	24·09	25·62	23·41	24·72	94	1·76	1·86	2·29	2·42
45	23·34	24·86	22·76	24·06	95	1·67	1·76	2·17	2·29
46	22·61	24·10	22·11	23·40	96	1·59	1·68	2·06	2·17
47	21·88	23·34	21·46	22·74	97	1·51	1·59	1·95	2·06
48	21·15	22·59	20·82	22·08	98	1·44	1·51	1·85	1·96
49	20·42	21·83	20·17	21·42	99	1·36	1·44	1·76	1·86

The POSSIBLE AFTERLIFETIME is 109 − x.

TABLE 7. — ANNUITIES AT RISKS OF LOSS VARYING REGULARLY EVERY YEAR, AND EXPRESSED BY THE FRACTIONS $\frac{1}{110}$, TO $\frac{1}{109}$ . . . . TO $\frac{1}{3}$, TO $\frac{1}{2}$, TO $\frac{1}{1}$.
(The Table represents a Life Table on DEMOIVRE's hypothesis in the columnar form.)

Rate of Interest, 3 per Cent.

n = Complement of Life = 110 − x	D_n	N_n	$\frac{N_n}{D_n}=A_n$	$\lambda\, n$	$\lambda\, D_n$	$\lambda\, N_n$	$\lambda\left(\frac{N_n}{D_n}\right)=\lambda A_n$	x = 110 − n
110	110·000	2,676·530	24·332	2·0413927	2·0413927	3·4275721	1·3861794	0
109	105·825	2,566·530	24·253	2·0374265	2·0245893	3·4093464	1·3847571	1
108	101·800	2,460·705	24·172	2·0334238	2·0077494	3·3910596	1·3833102	2
107	97·920	2,358·905	24·090	2·0293838	1·9908721	3·3727104	1·3818383	3
106	94·180	2,260·985	24·007	2·0253059	1·9739570	3·3542978	1·3803408	4
105	90·574	2,166·805	23·923	2·0211893	1·9570032	3·3358198	1·3788166	5
104	87·098	2,076·231	23·838	2·0170333	1·9400100	3·3172757	1·3772657	6
103	83·748	1,989·133	23·751	2·0128372	1·9229766	3·2986639	1·3756873	7
102	80·520	1,905·385	23·664	2·0086002	1·9059024	3·2799827	1·3740803	8
101	77·408	1,824·865	23·575	2·0043214	1·8887864	3·2612308	1·3724444	9
100	74·409	1,747·457	23·484	2·0000000	1·8716278	3·2424065	1·3707787	10
99	71·520	1,673·048	23·393	1·9956352	1·8544257	3·2235084	1·3690827	11
98	68·735	1,601·528	23·300	1·9912261	1·8371794	3·2045345	1·3673551	12
97	66·052	1,532·793	23·206	1·9867717	1·8198878	3·1854836	1·3655958	13
96	63·467	1,466·741	23·110	1·9822712	1·8025501	3·1663534	1·3638033	14
95	60·977	1,403·274	23·013	1·9777236	1·7851652	3·1471424	1·3619772	15
94	58·578	1,342·297	22·915	1·9731279	1·7677323	3·1278487	1·3601164	16
93	56·267	1,283·719	22·815	1·9684829	1·7502501	3·1084700	1·3582199	17
92	54·040	1,227·452	22·714	1·9637878	1·7327178	3·0890045	1·3562867	18
91	51·896	1,173·412	22·611	1·9590414	1·7151341	3·0694505	1·3543164	19
90	49·831	1,121·516	22·506	1·9542425	1·6974980	3·0498055	1·3523075	20
89	47·842	1,071·685	22·401	1·9493900	1·6798083	3·0300671	1·3502588	21
88	45·927	1,023·843	22·293	1·9444827	1·6620638	3·0102334	1·3481696	22
87	44·082	977·916	22·184	1·9395193	1·6442631	2·9903015	1·3460384	23
86	42·306	933·834	22·073	1·9344985	1·6264051	2·9702697	1·3438646	24
85	40·596	891·528	21·961	1·9294189	1·6084883	2·9501350	1·3416467	25
84	38·950	850·932	21·847	1·9242793	1·5905115	2·9298948	1·3393833	26
83	37·366	811·982	21·731	1·9190781	1·5724730	2·9095464	1·3370734	27
82	35·840	774·616	21·613	1·9138139	1·5543716	2·8890865	1·3347149	28
81	34·372	738·776	21·494	1·9084850	1·5362055	2·8685128	1·3323073	29
80	32·959	704·404	21·372	1·9030900	1·5179733	2·8478218	1·3298485	30
79	31·599	671·445	21·249	1·8976271	1·4996731	2·8270105	1·3273374	31
78	30·290	639·846	21·124	1·8920946	1·4813034	2·8060755	1·3247721	32
77	29·031	609·556	20·997	1·8864907	1·4628623	2·7850136	1·3221513	33
76	27·819	580·525	20·868	1·8808136	1·4443480	2·7638210	1·3194730	34
75	26·654	552·706	20·737	1·8750613	1·4257584	2·7424942	1·3167358	35
74	25·532	526·052	20·603	1·8692317	1·4070916	2·7210287	1·3139371	36
73	24·454	500·520	20·468	1·8633229	1·3883456	2·6994214	1·3110758	37
72	23·416	476·066	20·331	1·8573325	1·3695180	2·6776672	1·3081492	38
71	22·418	452·650	20·191	1·8512583	1·3506065	2·6557625	1·3051560	39
70	21·459	430·232	20·049	1·8450980	1·3316090	2·6337027	1·3020937	40
69	20·536	408·773	19·905	1·8388491	1·3125229	2·6114822	1·2989593	41
68	19·649	388·237	19·758	1·8325089	1·2933455	2·5890969	1·2957514	42
67	18·796	368·588	19·610	1·8260748	1·2740741	2·5665412	1·2924671	43
66	17·977	349·792	19·458	1·8195439	1·2547060	2·5438099	1·2891039	44
65	17·189	331·815	19·304	1·8129134	1·2352383	2·5208961	1·2856578	45
64	16·431	314·626	19·148	1·8061800	1·2156677	2·4977946	1·2821269	46
63	15·703	298·195	18·989	1·7993405	1·1959909	2·4745004	1·2785095	47
62	15·004	282·492	18·828	1·7923917	1·1762049	2·4510062	1·2748013	48
61	14·332	267·483	18·664	1·7853298	1·1563058	2·4273043	1·2709985	49
60	13·686	253·156	18·497	1·7781513	1·1362901	2·4033882	1·2670981	50
59	13·066	239·470	18·327	1·7708520	1·1161535	2·3792511	1·2630976	51
58	12·471	226·404	18·155	1·7634280	1·0958923	2·3548841	1·2589918	52
57	11·899	213·933	17·979	1·7558749	1·0755020	2·3302778	1·2547758	53
56	11·350	202·034	17·801	1·7481880	1·0549779	2·3054245	1·2504466	54

Note.— The series n corresponds with the l_x of the Life Table, and $\frac{n-1}{n}$ corresponds with p_x = probability of living a year, and with c_x = probability that X will pay a bill due at the end of the year.

Demoivre made 86 the extreme limit of his Table as he assumed that none lived after that age, and $86 - x = n$ was his *complement of life;* but 86 is an arbitrary number and for it any other number

TABLE 7.—ANNUITIES AT RISKS OF LOSS VARYING REGULARLY EVERY YEAR, AND EXPRESSED BY THE FRACTIONS $\frac{1}{110}$, TO $\frac{1}{109}$ . . . . TO $\frac{1}{3}$, TO $\frac{1}{2}$, TO $\frac{1}{1}$. (The Table represents a Life Table on DEMOIVRE's hypothesis in the columnar form.)—*Continued.*

Rate of Interest, 3 per Cent.

n = Complement of Life = $110 - x$	D_n	N_n	$\frac{N_n}{D_n} = A_n$	$\lambda . n$	$\lambda . D_n$	$\lambda . N_n$	$\lambda\left(\frac{N_n}{D_n}\right) = \lambda A_n$	x = $110 - n$
55	10·822	190·684	17·620	1·7403627	1·0343153	2·2803142	1·2459989	55
54	10·316	179·862	17·435	1·7323938	1·0135092	2·2549394	1·2414302	56
53	9·830	169·546	17·248	1·7242759	0·9925541	2·2292876	1·2367335	57
52	9·364	159·716	17·057	1·7160033	0·9714443	2·2033484	1·2319041	58
51	8·916	150·352	16·863	1·7075702	0·9501739	2·1771092	1·2269353	59
50	8·487	141·436	16·666	1·6989700	0·9287365	2·1505599	1·2218234	60
49	8·075	132·949	16·465	1·6901961	0·9071254	2·1236850	1·2165596	61
48	7·680	124·874	16·261	1·6812412	0·8853333	2·0964720	1·2111387	62
47	7·301	117·194	16·053	1·6720979	0·8633527	2·0689054	1·2055527	63
46	6·937	109·893	15·841	1·6627578	0·8411754	2·0409701	1·1997947	64
45	6·589	102·956	15·626	1·6532125	0·8187929	2·0126517	1·1938588	65
44	6·255	96·367	15·408	1·6434527	0·7961959	1·9839283	1·1877324	66
43	5·934	90·112	15·185	1·6334685	0·7733744	1·9547826	1·1814082	67
42	5·628	84·178	14·958	1·6232493	0·7503180	1·9251986	1·1748806	68
41	5·334	78·550	14·728	1·6127839	0·7270154	1·8951462	1·1681308	69
40	5·052	73·216	14·493	1·6020600	0·7034543	1·8646060	1·1611517	70
39	4·782	68·164	14·254	1·5910646	0·6796216	1·8335551	1·1539335	71
38	4·524	63·382	14·011	1·5797836	0·6555034	1·8019659	1·1464625	72
37	4·276	58·858	13·763	1·5682017	0·6310843	1·7698055	1·1387212	73
36	4·040	54·582	13·511	1·5563025	0·6063479	1·7370494	1·1307015	74
35	3·813	50·542	13·255	1·5440680	0·5812761	1·7036524	1·1223763	75
34	3·596	46·729	12·994	1·5314789	0·5558498	1·6695865	1·1137367	76
33	3·389	43·133	12·728	1·5185139	0·5300476	1·6348097	1·1047621	77
32	3·190	39·744	12·457	1·5051500	0·5038465	1·5992716	1·0954251	78
31	3·001	36·554	12·182	1·4913617	0·4772209	1·5629349	1·0857140	79
30	2·819	33·553	11·901	1·4771213	0·4501433	1·5257314	1·0755881	80
29	2·646	30·734	11·615	1·4623980	0·4225828	1·4876191	1·0650363	81
28	2·480	28·088	11·324	1·4471580	0·3945056	1·4485208	1·0540152	82
27	2·322	25·608	11·028	1·4313638	0·3658741	1·4083757	1·0425016	83
26	2·171	23·286	10·726	1·4149733	0·3366464	1·3670949	1·0304485	84
25	2·027	21·115	10·419	1·3979400	0·3067759	1·3245911	1·0178152	85
24	1·889	19·088	10·105	1·3802112	0·2762099	1·2807604	1·0045505	86
23	1·757	17·199	9·786	1·3617278	0·2448893	1·2355032	0·9906139	87
22	1·632	15·442	9·461	1·3424227	0·2127469	1·1887035	0·9759566	88
21	1·513	13·810	9·130	1·3222193	0·1797063	1·1401937	0·9604874	89
20	1·399	12·297	8·793	1·3010300	0·1456798	1·0897992	0·9441194	90
19	1·290	10·898	8·449	1·2787536	0·1105662	1·0373468	0·9267806	91
18	1·186	9·608	8·098	1·2552725	0·0742478	0·9826330	0·9083852	92
17	1·088	8·422	7·742	1·2304489	0·0365870	0·9254152	0·8888282	93
16	·994	7·334	7·378	1·2041200	$\bar{1}$·9974209	0·8653409	0·8679200	94
15	·905	6·340	7·007	1·1760913	$\bar{1}$·9565550	0·8020893	0·8455343	95
14	·820	5·435	6·629	1·1461280	$\bar{1}$·9137544	0·7351995	0·8214451	96
13	·739	4·615	6·244	1·1139434	$\bar{1}$·8687326	0·6641717	0·7954391	97
12	·662	3·876	5·851	1·0791812	$\bar{1}$·8211332	0·5883838	0·7672506	98
11	·590	3·214	5·452	1·0413927	$\bar{1}$·7705075	0·5070459	0·7365384	99
10	·520	2·624	5·043	1·0000000	$\bar{1}$·7162775	0·4189638	0·7026863	100
9	·455	2·104	4·628	0·9542425	$\bar{1}$·6576828	0·3230457	0·6653629	101
8	·392	1·649	4·203	0·9030900	$\bar{1}$·5936931	0·2172207	0·6235276	102
7	·333	1·257	3·771	0·8450980	$\bar{1}$·5228639	0·0993353	0·5764714	103
6	·277	·924	3·331	0·7781513	$\bar{1}$·4430799	$\bar{1}$·9656720	0·5225921	104
5	·224	·647	2·883	0·6989700	$\bar{1}$·3510614	$\bar{1}$·8109043	0·4598429	105
4	·174	·423	2·427	0·6020600	$\bar{1}$·2413142	$\bar{1}$·6263404	0·3850262	106
3	·127	·249	1·962	0·4771213	$\bar{1}$·1035383	$\bar{1}$·3961993	0·2926610	107
2	·082	·122	1·485	0·3010300	$\bar{2}$·9146097	$\bar{1}$·0863598	0·1717501	108
1	·040	·040	1·003	0·0000000	$\bar{2}$·6007425	$\bar{2}$·6020600	0·0013175	109

may be substituted. Thus if instead of 86, the number 110 is substituted, $110 - x = n$; and $110 - n = x =$ age.

For many purposes it will be found convenient to make twice the probable lifetime $(2\ T_x) = n$ in this Table. (See Table 6.)

TABLE 8.—VALUE of an ANNUITY of £1 on TWO, THREE, FOUR, and FIVE JOINT LIVES of EQUAL AGES. (Interest 3 per Cent.)

AGES.	TWO LIVES.	THREE LIVES.	FOUR LIVES.	FIVE LIVES.
	Male and Female.	2 Males, 1 Female.	2 Males, 2 Females.	3 Males, 2 Females.
	A_{xy}	A_{xxy}	A_{xxyy}	A_{xxxyy}
0	12·986	8·907	6·530	4·804
1	17·058	13·455	10·875	8·943
2	18·843	15·619	13·202	11·348
3	19·753	16·780	14·519	12·766
4	20·278	17·480	15·347	13·683
5	20·580	17·912	15·874	14·288
6	20·721	18·144	16·172	14·647
7	20·753	18·239	16·314	14·834
8	20·722	18·252	16·362	14·917
9	20·629	18·183	16·317	14·896
10	20·485	18·049	16·196	14·789
11	20·301	17·864	16·016	14·616
12	20·089	17·642	15·793	14·393
13	19·857	17·395	15·541	14·138
14	19·615	17·134	15·274	13·865
15	19·368	16·868	15·003	13·588
16	19·123	16·607	14·736	13·316
17	18·886	16·356	14·482	13·059
18	18·660	16·120	14·247	12·822
19	18·448	15·904	14·034	12·611
20	18·251	15·709	13·847	12·429
21	18·072	15·537	13·688	12·279
22	17·892	15·365	13·530	12·130
23	17·710	15·192	13·371	11·981
24	17·525	15·018	13·213	11·832
25	17·339	14·841	13·053	11·682
26	17·149	14·662	12·892	11·531
27	16·957	14·480	12·728	11·379
28	16·761	14·295	12·563	11·224
29	16·561	14·107	12·396	11·067
30	16·358	13·915	12·225	10·908
31	16·150	13·720	12·052	10·746
32	15·938	13·521	11·876	10·581
33	15·722	13·318	11·696	10·413
34	15·502	13·110	11·513	10·242
35	15·276	12·899	11·327	10·068
36	15·046	12·684	11·137	9·890
37	14·812	12·465	10·943	9·710
38	14·572	12·241	10·746	9·526
39	14·328	12·014	10·545	9·339
40	14·078	11·782	10·340	9·149
41	13·824	11·547	10·132	8·956
42	13·565	11·308	9·920	8·760
43	13·301	11·065	9·704	8·561
44	13·032	10·818	9·484	8·358
45	12·757	10·567	9·261	8·153
46	12·478	10·312	9·033	7·944
47	12·193	10·053	8·801	7·732
48	11·902	9·790	8·564	7·516
49	11·606	9·522	8·323	7·295
50	11·304	9·250	8·075	7·070
51	10·995	8·972	7·822	6·839
52	10·685	8·699	7·570	6·613
53	10·370	8·422	7·312	6·383
54	10·048	8·140	7·047	6·147
55	9·734	7·865	6·795	5·922
56	9·420	7·591	6·544	5·698
57	9·106	7·317	6·296	5·477
58	8·792	7·044	6·049	5·257
59	8·479	6·772	5·805	5·039
60	8·167	6·502	5·562	4·823
61	7·857	6·234	5·323	4·610
62	7·549	5·969	5·087	4·402
63	7·245	5·709	4·856	4·197
64	6·945	5·453	4·631	3·998
65	6·650	5·204	4·411	3·804
66	6·361	4·961	4·197	3·617
67	6·079	4·725	3·991	3·436
68	5·805	4·497	3·792	3·264
69	5·538	4·277	3·602	3·098
70	5·280	4·066	3·420	2·941
71	5·031	3·864	3·247	2·792
72	4·792	3·671	3·082	2·651
73	4·562	3·487	2·926	2·518
74	4·343	3·313	2·779	2·393
75	4·133	3·149	2·641	2·276
76	3·933	2·993	2·511	2·167
77	3·744	2·847	2·389	2·065
78	3·564	2·709	2·275	1·970
79	3·393	2·580	2·169	1·883
80	3·232	2·458	2·070	1·803
81	3·081	2·345	1·978	1·730
82	2·938	2·239	1·892	1·660
83	2·803	2·140	1·813	1·596
84	2·676	2·048	1·740	1·574
85	2·558	1·963	1·676	1·637

Note.—*x* denotes the age of the Male life and *y* the age of the Female.

TABLE 9.—VALUE of an ANNUITY of £1 on a SINGLE LIFE and on TWO JOINT LIVES of EQUAL AGES. (Interest 3 per Cent.)

AGES.	MALE.	FEMALE.	MALE AND FEMALE of Equal Ages.	TWO MALES of Equal Ages.	TWO FEMALES of Equal Ages.
	A_x	A_y	A_{xy}	A_{xx}	A_{yy}
	£	£	£	£	£
0	19·151	19·850	12·986	12·567	13·421
5	24·437	24·481	20·580	20·599	20·565
10	24·107	24·147	20·485	20·520	20·453
20	22·061	22·209	18·251	18·227	18·282
30	20·014	20·337	16·358	16·228	16·497
40	17·474	18·035	14·078	13·796	14·379
50	14·424	15·094	11·304	10·956	11·675
60	11·018	11·527	8·167	7·941	8·408
70	7·610	8·016	5·280	5·122	5·449

TABLE 10.—VALUE OF LIFE ANNUITY of £1 deduced (1) by making the *Complement of Life* $= n = 2\,T_x$; and (2) by making the *Complement of Life* $= n = 2\,E_x$.

MALES. Interest 3 per Cent.

AGE.	ESTIMATED *Complement of Life.*		VALUE OF LIFE ANNUITY.		
(x)	$2\,T_x$	$2\,E_x$	$n = 2\,T_x$	$n = 2\,E_x$	Exact Value.
			£	£	£
4	109·84	99·62	24·319	23·449	24·302
10	101·96	94·10	23·660	22·925	24·107
20	85·10	78·96	21·972	21·244	22·061
30	69·54	65·52	19·983	19·384	20·014
40	54·18	52·12	17·468	17·080	17·474
50	39·42	39·08	14·354	14·273	14·424
60	26·00	27·06	10·726	11·052	11·018
70	15·10	16·90	7·044	7·706	7·610

MONETARY TABLES.

Table of **Shillings, Pence,** and **Farthings,** reduced to the Decimal Parts of **£1.**

s.	d.	Decimal.	s.	d.	Decimal.	s.	d.	Decimal.	s.	d.	Decimal.	s.	d.	Decimal.
		£			£			£			£			£
	0	·00000	**1**	**0**	·05000	**2**	**0**	·10000	**3**	**0**	·15000	**4**	**0**	·20000
	0¼	·00104	1	0¼	·05104	2	0¼	·10104	3	0¼	·15104	4	0¼	·20104
	0½	·00208	1	0½	·05208	2	0½	·10208	3	0½	·15208	4	0½	·20208
	0¾	·00313	1	0¾	·05313	2	0¾	·10313	3	0¾	·15313	4	0¾	·20313
	1	·00417	**1**	**1**	·05417	**2**	**1**	·10417	**3**	**1**	·15417	**4**	**1**	·20417
	1¼	·00521	1	1¼	·05521	2	1¼	·10521	3	1¼	·15521	4	1¼	·20521
	1½	·00625	1	1½	·05625	2	1½	·10625	3	1½	·15625	4	1½	·20625
	1¾	·00729	1	1¾	·05729	2	1¾	·10729	3	1¾	·15729	4	1¾	·20729
	2	·00833	**1**	**2**	·05833	**2**	**2**	·10833	**3**	**2**	·15833	**4**	**2**	·20833
	2¼	·00938	1	2¼	·05938	2	2¼	·10938	3	2¼	·15938	4	2¼	·20938
	2½	·01042	1	2½	·06042	2	2½	·11042	3	2½	·16042	4	2½	·21042
	2¾	·01146	1	2¾	·06146	2	2¾	·11146	3	2¾	·16146	4	2¾	·21146
	3	·01250	**1**	**3**	·06250	**2**	**3**	·11250	**3**	**3**	·16250	**4**	**3**	·21250
	3¼	·01354	1	3¼	·06354	2	3¼	·11354	3	3¼	·16354	4	3¼	·21354
	3½	·01458	1	3½	·06458	2	3½	·11458	3	3½	·16458	4	3½	·21458
	3¾	·01563	1	3¾	·06563	2	3¾	·11563	3	3¾	·16563	4	3¾	·21563
	4	·01667	**1**	**4**	·06667	**2**	**4**	·11667	**3**	**4**	·16667	**4**	**4**	·21667
	4¼	·01771	1	4¼	·06771	2	4¼	·11771	3	4¼	·16771	4	4¼	·21771
	4½	·01875	1	4½	·06875	2	4½	·11875	3	4½	·16875	4	4½	·21875
	4¾	·01979	1	4¾	·06979	2	4¾	·11979	3	4¾	·16979	4	4¾	·21979
	5	·02083	**1**	**5**	·07083	**2**	**5**	·12083	**3**	**5**	·17083	**4**	**5**	·22083
	5¼	·02188	1	5¼	·07188	2	5¼	·12188	3	5¼	·17188	4	5¼	·22188
	5½	·02292	1	5½	·07292	2	5½	·12292	3	5½	·17292	4	5½	·22292
	5¾	·02396	1	5¾	·07396	2	5¾	·12396	3	5¾	·17396	4	5¾	·22396
	6	·02500	**1**	**6**	·07500	**2**	**6**	·12500	**3**	**6**	·17500	**4**	**6**	·22500
	6¼	·02604	1	6¼	·07604	2	6¼	·12604	3	6¼	·17604	4	6¼	·22604
	6½	·02708	1	6½	·07708	2	6½	·12708	3	6½	·17708	4	6½	·22708
	6¾	·02813	1	6¾	·07813	2	6¾	·12813	3	6¾	·17813	4	6¾	·22813
	7	·02917	**1**	**7**	·07917	**2**	**7**	·12917	**3**	**7**	·17917	**4**	**7**	·22917
	7¼	·03021	1	7¼	·08021	2	7¼	·13021	3	7¼	·18021	4	7¼	·23021
	7½	·03125	1	7½	·08125	2	7½	·13125	3	7½	·18125	4	7½	·23125
	7¾	·03229	1	7¾	·08229	2	7¾	·13229	3	7¾	·18229	4	7¾	·23229
	8	·03333	**1**	**8**	·08333	**2**	**8**	·13333	**3**	**8**	·18333	**4**	**8**	·23333
	8¼	·03438	1	8¼	·08438	2	8¼	·13438	3	8¼	·18438	4	8¼	·23438
	8½	·03542	1	8½	·08542	2	8½	·13542	3	8½	·18542	4	8½	·23542
	8¾	·03646	1	8¾	·08646	2	8¾	·13646	3	8¾	·18646	4	8¾	·23646
	9	·03750	**1**	**9**	·08750	**2**	**9**	·13750	**3**	**9**	·18750	**4**	**9**	·23750
	9¼	·03854	1	9¼	·08854	2	9¼	·13854	3	9¼	·18854	4	9¼	·23854
	9½	·03958	1	9½	·08958	2	9½	·13958	3	9½	·18958	4	9½	·23958
	9¾	·04063	1	9¾	·09063	2	9¾	·14063	3	9¾	·19063	4	9¾	·24063
	10	·04167	**1**	**10**	·09167	**2**	**10**	·14167	**3**	**10**	·19167	**4**	**10**	·24167
	10¼	·04271	1	10¼	·09271	2	10¼	·14271	3	10¼	·19271	4	10¼	·24271
	10½	·04375	1	10½	·09375	2	10½	·14375	3	10½	·19375	4	10½	·24375
	10¾	·04479	1	10¾	·09479	2	10¾	·14479	3	10¾	·19479	4	10¾	·24479
	11	·04583	**1**	**11**	·09583	**2**	**11**	·14583	**3**	**11**	·19583	**4**	**11**	·24583
	11¼	·04688	1	11¼	·09688	2	11¼	·14688	3	11¼	·19688	4	11¼	·24688
	11½	·04792	1	11½	·09792	2	11½	·14792	3	11½	·19792	4	11½	·24792
	11¾	·04896	1	11¾	·09896	2	11¾	·14896	3	11¾	·19896	4	11¾	·24896

Table of **Shillings, Pence,** and **Farthings,** reduced to the Decimal Parts of **£1.**

s.	*d.*	**Decimal.**	*s.*	*d.*	**Decimal.**	*s.*	*d.*	**Decimal.**	*s.*	*d.*	**Decimal.**	*s.*	*d.*	**Decimal.**
		£			£			£			£			£
5	**0**	·25000	**6**	**0**	·30000	**7**	**0**	·35000	**8**	**0**	·40000	**9**	**0**	·45000
5	0¼	·25104	6	0¼	·30104	7	0¼	·35104	8	0¼	·40104	9	0¼	·45104
5	0½	·25208	6	0½	·30208	7	0½	·35208	8	0½	·40208	9	0½	·45208
5	0¾	·25313	6	0¾	·30313	7	0¾	·35313	8	0¾	·40313	9	0¾	·45313
5	**1**	·25417	**6**	**1**	·30417	**7**	**1**	·35417	**8**	**1**	·40417	**9**	**1**	·45417
5	1¼	·25521	6	1¼	·30521	7	1¼	·35521	8	1¼	·40521	9	1¼	·45521
5	1½	·25625	6	1½	·30625	7	1½	·35625	8	1½	·40625	9	1½	·45625
5	1¾	·25729	6	1¾	·30729	7	1¾	·35729	8	1¾	·40729	9	1¾	·45729
5	**2**	·25833	**6**	**2**	·30833	**7**	**2**	·35833	**8**	**2**	·40833	**9**	**2**	·45833
5	2¼	·25938	6	2¼	·30938	7	2¼	·35938	8	2¼	·40938	9	2¼	·45938
5	2½	·26042	6	2½	·31042	7	2½	·36042	8	2½	·41042	9	2½	·46042
5	2¾	·26146	6	2¾	·31146	7	2¾	·36146	8	2¾	·41146	9	2¾	·46146
5	**3**	·26250	**6**	**3**	·31250	**7**	**3**	·36250	**8**	**3**	·41250	**9**	**3**	·46250
5	3¼	·26354	6	3¼	·31354	7	3¼	·36354	8	3¼	·41354	9	3¼	·46354
5	3½	·26458	6	3½	·31458	7	3½	·36458	8	3½	·41458	9	3½	·46458
5	3¾	·26563	6	3¾	·31563	7	3¾	·36563	8	3¾	·41563	9	3¾	·46563
5	**4**	·26667	**6**	**4**	·31667	**7**	**4**	·36667	**8**	**4**	·41667	**9**	**4**	·46667
5	4¼	·26771	6	4¼	·31771	7	4¼	·36771	8	4¼	·41771	9	4¼	·46771
5	4½	·26875	6	4½	·31875	7	4½	·36875	8	4½	·41875	9	4½	·46875
5	4¾	·26979	6	4¾	·31979	7	4¾	·36979	8	4¾	·41979	9	4¾	·46979
5	**5**	·27083	**6**	**5**	·32083	**7**	**5**	·37083	**8**	**5**	·42083	**9**	**5**	·47083
5	5¼	·27188	6	5¼	·32188	7	5¼	·37188	8	5¼	·42188	9	5¼	·47188
5	5½	·27292	6	5½	·32292	7	5½	·37292	8	5½	·42292	9	5½	·47292
5	5¾	·27396	6	5¾	·32396	7	5¾	·37396	8	5¾	·42396	9	5¾	·47396
5	**6**	·27500	**6**	**6**	·32500	**7**	**6**	·37500	**8**	**6**	·42500	**9**	**6**	·47500
5	6¼	·27604	6	6¼	·32604	7	6¼	·37604	8	6¼	·42604	9	6¼	·47604
5	6½	·27708	6	6½	·32708	7	6½	·37708	8	6½	·42708	9	6½	·47708
5	6¾	·27813	6	6¾	·32813	7	6¾	·37813	8	6¾	·42813	9	6¾	·47813
5	**7**	·27917	**6**	**7**	·32917	**7**	**7**	·37917	**8**	**7**	·42917	**9**	**7**	·47917
5	7¼	·28021	6	7¼	·33021	7	7¼	·38021	8	7¼	·43021	9	7¼	·48021
5	7½	·28125	6	7½	·33125	7	7½	·38125	8	7½	·43125	9	7½	·48125
5	7¾	·28229	6	7¾	·33229	7	7¾	·38229	8	7¾	·43229	9	7¾	·48229
5	**8**	·28333	**6**	**8**	·33333	**7**	**8**	·38333	**8**	**8**	·43333	**9**	**8**	·48333
5	8¼	·28438	6	8¼	·33438	7	8¼	·38438	8	8¼	·43438	9	8¼	·48438
5	8½	·28542	6	8½	·33542	7	8½	·38542	8	8½	·43542	9	8½	·48542
5	8¾	·28646	6	8¾	·33646	7	8¾	·38646	8	8¾	·43646	9	8¾	·48646
5	**9**	·28750	**6**	**9**	·33750	**7**	**9**	·38750	**8**	**9**	·43750	**9**	**9**	·48750
5	9¼	·28854	6	9¼	·33854	7	9¼	·38854	8	9¼	·43854	9	9¼	·48854
5	9½	·28958	6	9½	·33958	7	9½	·38958	8	9½	·43958	9	9½	·48958
5	9¾	·29063	6	9¾	·34063	7	9¾	·39063	8	9¾	·44063	9	9¾	·49063
5	**10**	·29167	**6**	**10**	·34167	**7**	**10**	·39167	**8**	**10**	·44167	**9**	**10**	·49167
5	10¼	·29271	6	10¼	·34271	7	10¼	·39271	8	10¼	·44271	9	10¼	·49271
5	10½	·29375	6	10½	·34375	7	10½	·39375	8	10½	·44375	9	10½	·49375
5	10¾	·29479	6	10¾	·34479	7	10¾	·39479	8	10¾	·44479	9	10¾	·49479
5	**11**	·29583	**6**	**11**	·34583	**7**	**11**	·39583	**8**	**11**	·44583	**9**	**11**	·49583
5	11¼	·29688	6	11¼	·34688	7	11¼	·39688	8	11¼	·44688	9	11¼	·49688
5	11½	·29792	6	11½	·34792	7	11½	·39792	8	11½	·44792	9	11½	·49792
5	11¾	·29896	6	11¾	·34896	7	11¾	·39896	8	11¾	·44896	9	11¾	·49896

Table of Shillings, Pence, and Farthings, reduced to the Decimal Parts of £1.

s.	d.	Decimal.	s.	d.	Decimal.	s.	d.	Decimal.	s.	d.	Decimal.	s.	d.	Decimal.
		£			£			£			£			£
10	**0**	·50000	**11**	**0**	·55000	**12**	**0**	·60000	**13**	**0**	·65000	**14**	**0**	·70000
10	0¼	·50104	11	0¼	·55104	12	0¼	·60104	13	0¼	·65104	14	0¼	·70104
10	0½	·50208	11	0½	·55208	12	0½	·60208	13	0½	·65208	14	0½	·70208
10	0¾	·50313	11	0¾	·55313	12	0¾	·60313	13	0¾	·65313	14	0¾	·70313
10	**1**	·50417	**11**	**1**	·55417	**12**	**1**	·60417	**13**	**1**	·65417	**14**	**1**	·70417
10	1¼	·50521	11	1¼	·55521	12	1¼	·60521	13	1¼	·65521	14	1¼	·70521
10	1½	·50625	11	1½	·55625	12	1½	·60625	13	1½	·65625	14	1½	·70625
10	1¾	·50729	11	1¾	·55729	12	1¾	·60729	13	1¾	·65729	14	1¾	·70729
10	**2**	·50833	**11**	**2**	·55833	**12**	**2**	·60833	**13**	**2**	·65833	**14**	**2**	·70833
10	2¼	·50938	11	2¼	·55938	12	2¼	·60938	13	2¼	·65938	14	2¼	·70938
10	2½	·51042	11	2½	·56042	12	2½	·61042	13	2½	·66042	14	2½	·71042
10	2¾	·51146	11	2¾	·56146	12	2¾	·61146	13	2¾	·66146	14	2¾	·71146
10	**3**	·51250	**11**	**3**	·56250	**12**	**3**	·61250	**13**	**3**	·66250	**14**	**3**	·71250
10	3¼	·51354	11	3¼	·56354	12	3¼	·61354	13	3¼	·66354	14	3¼	·71354
10	3½	·51458	11	3½	·56458	12	3½	·61458	13	3½	·66458	14	3½	·71458
10	3¾	·51563	11	3¾	·56563	12	3¾	·61563	13	3¾	·66563	14	3¾	·71563
10	**4**	·51667	**11**	**4**	·56667	**12**	**4**	·61667	**13**	**4**	·66667	**14**	**4**	·71667
10	4¼	·51771	11	4¼	·56771	12	4¼	·61771	13	4¼	·66771	14	4¼	·71771
10	4½	·51875	11	4½	·56875	12	4½	·61875	13	4½	·66875	14	4½	·71875
10	4¾	·51979	11	4¾	·56979	12	4¾	·61979	13	4¾	·66979	14	4¾	·71979
10	**5**	·52083	**11**	**5**	·57083	**12**	**5**	·62083	**13**	**5**	·67083	**14**	**5**	·72083
10	5¼	·52188	11	5¼	·57188	12	5¼	·62188	13	5¼	·67188	14	5¼	·72188
10	5½	·52292	11	5½	·57292	12	5½	·62292	13	5½	·67292	14	5½	·72292
10	5¾	·52396	11	5¾	·57396	12	5¾	·62396	13	5¾	·67396	14	5¾	·72396
10	**6**	·52500	**11**	**6**	·57500	**12**	**6**	·62500	**13**	**6**	·67500	**14**	**6**	·72500
10	6¼	·52604	11	6¼	·57604	12	6¼	·62604	13	6¼	·67604	14	6¼	·72604
10	6½	·52708	11	6½	·57708	12	6½	·62708	13	6½	·67708	14	6½	·72708
10	6¾	·52813	11	6¾	·57813	12	6¾	·62813	13	6¾	·67813	14	6¾	·72813
10	**7**	·52917	**11**	**7**	·57917	**12**	**7**	·62917	**13**	**7**	·67917	**14**	**7**	·72917
10	7¼	·53021	11	7¼	·58021	12	7¼	·63021	13	7¼	·68021	14	7¼	·73021
10	7½	·53125	11	7½	·58125	12	7½	·63125	13	7½	·68125	14	7½	·73125
10	7¾	·53229	11	7¾	·58229	12	7¾	·63229	13	7¾	·68229	14	7¾	·73229
10	**8**	·53333	**11**	**8**	·58333	**12**	**8**	·63333	**13**	**8**	·68333	**14**	**8**	·73333
10	8¼	·53438	11	8¼	·58438	12	8¼	·63438	13	8¼	·68438	14	8¼	·73438
10	8½	·53542	11	8½	·58542	12	8½	·63542	13	8½	·68542	14	8½	·73542
10	8¾	·53646	11	8¾	·58646	12	8¾	·63646	13	8¾	·68646	14	8¾	·73646
10	**9**	·53750	**11**	**9**	·58750	**12**	**9**	·63750	**13**	**9**	·68750	**14**	**9**	·73750
10	9¼	·53854	11	9¼	·58854	12	9¼	·63854	13	9¼	·68854	14	9¼	·73854
10	9½	·53958	11	9½	·58958	12	9½	·63958	13	9½	·68958	14	9½	·73958
10	9¾	·54063	11	9¾	·59063	12	9¾	·64063	13	9¾	·69063	14	9¾	·74063
10	**10**	·54167	**11**	**10**	·59167	**12**	**10**	·64167	**13**	**10**	·69167	**14**	**10**	·74167
10	10¼	·54271	11	10¼	·59271	12	10¼	·64271	13	10¼	·69271	14	10¼	·74271
10	10½	·54375	11	10½	·59375	12	10½	·64375	13	10½	·69375	14	10½	·74375
10	10¾	·54479	11	10¾	·59479	12	10¾	·64479	13	10¾	·69479	14	10¾	·74479
10	**11**	·54583	**11**	**11**	·59583	**12**	**11**	·64583	**13**	**11**	·69583	**14**	**11**	·74583
10	11¼	·54688	11	11¼	·59688	12	11¼	·64688	13	11¼	·69688	14	11¼	·74688
10	11½	·54792	11	11½	·59792	12	11½	·64792	13	11½	·69792	14	11½	·74792
10	11¾	·54896	11	11¾	·59896	12	11¾	·64896	13	11¾	·69896	14	11¾	·74896

Table of Shillings, Pence, and Farthings, reduced to the Decimal Parts of £1.

s.	*d.*	Decimal.	*s.*	*d.*	Decimal.	*s.*	*d.*	Decimal.	*s.*	*d.*	Decimal.	*s.*	*d.*	Decimal.
		£			£			£			£			£
15	**0**	·75000	**16**	**0**	·80000	**17**	**0**	·85000	**18**	**0**	·90000	**19**	**0**	·95000
15	0¼	·75104	16	0¼	·80104	17	0¼	·85104	18	0¼	·90104	19	0¼	·95104
15	0½	·75208	16	0½	·80208	17	0½	·85208	18	0½	·90208	19	0½	·95208
15	0¾	·75313	16	0¾	·80313	17	0¾	·85313	18	0¾	·90313	19	0¾	·95313
15	**1**	·75417	**16**	**1**	·80417	**17**	**1**	·85417	**18**	**1**	·90417	**19**	**1**	·95417
15	1¼	·75521	16	1¼	·80521	17	1¼	·85521	18	1¼	·90521	19	1¼	·95521
15	1½	·75625	16	1½	·80625	17	1½	·85625	18	1½	·90625	19	1½	·95625
15	1¾	·75729	16	1¾	·80729	17	1¾	·85729	18	1¾	·90729	19	1¾	·95729
15	**2**	·75833	**16**	**2**	·80833	**17**	**2**	·85833	**18**	**2**	·90833	**19**	**2**	·95833
15	2¼	·75938	16	2¼	·80938	17	2¼	·85938	18	2¼	·90938	19	2¼	·95938
15	2½	·76042	16	2½	·81042	17	2½	·86042	18	2½	·91042	19	2½	·96042
15	2¾	·76146	16	2¾	·81146	17	2¾	·86146	18	2¾	·91146	19	2¾	·96146
15	**3**	·76250	**16**	**3**	·81250	**17**	**3**	·86250	**18**	**3**	·91250	**19**	**3**	·96250
15	3¼	·76354	16	3¼	·81354	17	3¼	·86354	18	3¼	·91354	19	3¼	·96354
15	3½	·76458	16	3½	·81458	17	3½	·86458	18	3½	·91458	19	3½	·96458
15	3¾	·76563	16	3¾	·81563	17	3¾	·86563	18	3¾	·91563	19	3¾	·96563
15	**4**	·76667	**16**	**4**	·81667	**17**	**4**	·86667	**18**	**4**	·91667	**19**	**4**	·96667
15	4¼	·76771	16	4¼	·81771	17	4¼	·86771	18	4¼	·91771	19	4¼	·96771
15	4½	·76875	16	4½	·81875	17	4½	·86875	18	4½	·91875	19	4½	·96875
15	4¾	·76979	16	4¾	·81979	17	4¾	·86979	18	4¾	·91979	19	4¾	·96979
15	**5**	·77083	**16**	**5**	·82083	**17**	**5**	·87083	**18**	**5**	·92083	**19**	**5**	·97083
15	5¼	·77188	16	5¼	·82188	17	5¼	·87188	18	5¼	·92188	19	5¼	·97188
15	5½	·77292	16	5½	·82292	17	5½	·87292	18	5½	·92292	19	5½	·97292
15	5¾	·77396	16	5¾	·82396	17	5¾	·87396	18	5¾	·92396	19	5¾	·97396
15	**6**	·77500	**16**	**6**	·82500	**17**	**6**	·87500	**18**	**6**	·92500	**19**	**6**	·97500
15	6¼	·77604	16	6¼	·82604	17	6¼	·87604	18	6¼	·92604	19	6¼	·97604
15	6½	·77708	16	6½	·82708	17	6½	·87708	18	6½	·92708	19	6½	·97708
15	6¾	·77813	16	6¾	·82813	17	6¾	·87813	18	6¾	·92813	19	6¾	·97813
15	**7**	·77917	**16**	**7**	·82917	**17**	**7**	·87917	**18**	**7**	·92917	**19**	**7**	·97917
15	7¼	·78021	16	7¼	·83021	17	7¼	·88021	18	7¼	·93021	19	7¼	·98021
15	7½	·78125	16	7½	·83125	17	7½	·88125	18	7½	·93125	19	7½	·98125
15	7¾	·78229	16	7¾	·83229	17	7¾	·88229	18	7¾	·93229	19	7¾	·98229
15	**8**	·78333	**16**	**8**	·83333	**17**	**8**	·88333	**18**	**8**	·93333	**19**	**8**	·98333
15	8¼	·78438	16	8¼	·83438	17	8¼	·88438	18	8¼	·93438	19	8¼	·98438
15	8½	·78542	16	8½	·83542	17	8½	·88542	18	8½	·93542	19	8½	·98542
15	8¾	·78646	16	8¾	·83646	17	8¾	·88646	18	8¾	·93646	19	8¾	·98646
15	**9**	·78750	**16**	**9**	·83750	**17**	**9**	·88750	**18**	**9**	·93750	**19**	**9**	·98750
15	9¼	·78854	16	9¼	·83854	17	9¼	·88854	18	9¼	·93854	19	9¼	·98854
15	9½	·78958	16	9½	·83958	17	9½	·88958	18	9½	·93958	19	9½	·98958
15	9¾	·79063	16	9¾	·84063	17	9¾	·89063	18	9¾	·94063	19	9¾	·99063
15	**10**	·79167	**16**	**10**	·84167	**17**	**10**	·89167	**18**	**10**	·94167	**19**	**10**	·99167
15	10¼	·79271	16	10¼	·84271	17	10¼	·89271	18	10¼	·94271	19	10¼	·99271
15	10½	·79375	16	10½	·84375	17	10½	·89375	18	10½	·94375	19	10½	·99375
15	10¾	·79479	16	10¾	·84479	17	10¾	·89479	18	10¾	·94479	19	10¾	·99479
15	**11**	·79583	**16**	**11**	·84583	**17**	**11**	·89583	**18**	**11**	·94583	**19**	**11**	·99583
15	11¼	·79688	16	11¼	·84688	17	11¼	·89688	18	11¼	·94688	19	11¼	·99688
15	11½	·79792	16	11½	·84792	17	11½	·89792	18	11½	·94792	19	11½	·99792
15	11¾	·79896	16	11¾	·84896	17	11¾	·89896	18	11¾	·94896	19	11¾	·99896

Logarithms of the Present Value of £1, payable at the end of every Year, from 1 to 109 Years; Rates of Interest 3, 3¼, 3⅓, and 3½ per Cent.

$\lambda\ v^x$ *

Years (x)	3 per cent.	Years (x)	3¼ per cent.	Years (x)	3⅓ per cent.	Years (x)	3½ per cent.
0	0·0000000	0	0·0000000	0	0·0000000	0	0·0000000
1	9·9871628	1	9·9861099	1	9·9857596	1	9·9850597
2	9·9743256	2	9·9722199	2	9·9715191	2	9·9701193
3	9·9614883	3	9·9583298	3	9·9572787	3	9·9551790
4	9·9486511	4	9·9444398	4	9·9430382	4	9·9402386
5	9·9358139	5	9·9305497	5	9·9287978	5	9·9252983
6	9·9229767	6	9·9166596	6	9·9145574	6	9·9103579
7	9·9101394	7	9·9027696	7	9·9003169	7	9·8954176
8	9·8973022	8	9·8888795	8	9·8860765	8	9·8804772
9	9·8844650	9	9·8749895	9	9·8718360	9	9·8655369
10	9·8716278	10	9·8610994	10	9·8575956	10	9·8505965
11	9·8587905	11	9·8472093	11	9·8433552	11	9·8356562
12	9·8459533	12	9·8333193	12	9·8291147	12	9·8207158
13	9·8331161	13	9·8194292	13	9·8148743	13	9·8057755
14	9·8202789	14	9·8055392	14	9·8006339	14	9·7908351
15	9·8074416	15	9·7916491	15	9·7863934	15	9·7758948
16	9·7946044	16	9·7777590	16	9·7721530	16	9·7609544
17	9·7817672	17	9·7638690	17	9·7579125	17	9·7460141
18	9·7689300	18	9·7499789	18	9·7436721	18	9·7310737
19	9·7560927	19	9·7360889	19	9·7294317	19	9·7161334
20	9·7432555	20	9·7221988	20	9·7151912	20	9·7011930
21	9·7304183	21	9·7083087	21	9·7009508	21	9·6862527
22	9·7175811	22	9·6944187	22	9·6867103	22	9·6713123
23	9·7047438	23	9·6805286	23	9·6724699	23	9·6563720
24	9·6919066	24	9·6666386	24	9·6582295	24	9·6414316
25	9·6790694	25	9·6527485	25	9·6439890	25	9·6264913
26	9·6662322	26	9·6388584	26	9·6297486	26	9·6115509
27	9·6533949	27	9·6249684	27	9·6155081	27	9·5966106
28	9·6405577	28	9·6110783	28	9·6012677	28	9·5816702
29	9·6277205	29	9·5971883	29	9·5870273	29	9·5667299
30	9·6148833	30	9·5832982	30	9·5727868	30	9·5517895
31	9·6020460	31	9·5694081	31	9·5585464	31	9·5368492
32	9·5892088	32	9·5555181	32	9·5443059	32	9·5219088
33	9·5763716	33	9·5416280	33	9·5300655	33	9·5069685
34	9·5635344	34	9·5277379	34	9·5158251	34	9·4920281
35	9·5506971	35	9·5138479	35	9·5015846	35	9·4770878
36	9·5378599	36	9·4999578	36	9·4873442	36	9·4621474
37	9·5250227	37	9·4860678	37	9·4731038	37	9·4472071
38	9·5121855	38	9·4721777	38	9·4588633	38	9·4322667
39	9·4993482	39	9·4582876	39	9·4446229	39	9·4173264
40	9·4865110	40	9·4443976	40	9·4303824	40	9·4023860
41	9·4736738	41	9·4305075	41	9·4161420	41	9·3874457
42	9·4608366	42	9·4166175	42	9·4019016	42	9·3725053
43	9·4479993	43	9·4027274	43	9·3876611	43	9·3575650
44	9·4351621	44	9·3888373	44	9·3734207	44	9·3426246
45	9·4223249	45	9·3749473	45	9·3591802	45	9·3276843
46	9·4094877	46	9·3610572	46	9·3449398	46	9·3127439
47	9·3966504	47	9·3471672	47	9·3306994	47	9·2978036
48	9·3838132	48	9·3332771	48	9·3164589	48	9·2828632
49	9·3709760	49	9·3193870	49	9·3022185	49	9·2679229
50	9·3581388	50	9·3054970	50	9·2879780	50	9·2529825
51	9·3453015	51	9·2916069	51	9·2737376	51	9·2380422
52	9·3324643	52	9·2777169	52	9·2594972	52	9·2231018
53	9·3196271	53	9·2638268	53	9·2452567	53	9·2081615
54	9·3067899	54	9·2499367	54	9·2310163	54	9·1932211

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* See Note at page 20.

Logarithms of the Present Value of £1, payable at the end of every Year, from 1 to 109 Years; **Rates of Interest 3, 3¼, 3⅓, and 3½ per Cent.**

$\lambda\ v^x$

Years (x)	3 per cent.	Years (x)	3¼ per cent.	Years (x)	3⅓ per cent.	Years (x)	3½ per cent.
55	9·2939526	55	9·2360467	55	9·2167758	55	9·1782808
56	9·2811154	56	9·2221566	56	9·2025354	56	9·1633404
57	9·2682782	57	9·2082666	57	9·1882950	57	9·1484001
58	9·2554410	58	9·1943765	58	9·1740545	58	9·1334597
59	9·2426037	59	9·1804864	59	9·1598141	59	9·1185194
60	9·2297665	60	9·1665964	60	9·1455737	60	9·1035790
61	9·2169293	61	9·1527063	61	9·1313332	61	9·0886387
62	9·2040921	62	9·1388163	62	9·1170928	62	9·0736983
63	9·1912548	63	9·1249262	63	9·1028523	63	9·0587580
64	9·1784176	64	9·1110361	64	9·0886119	64	9·0438176
65	9·1655804	65	9·0971461	65	9·0743715	65	9·0288773
66	9·1527432	66	9·0832560	66	9·0601310	66	9·0139369
67	9·1399059	67	9·0693660	67	9·0458906	67	8·9989966
68	9·1270687	68	9·0554759	68	9·0316501	68	8·9840562
69	9·1142315	69	9·0415858	69	9·0174097	69	8·9691159
70	9·1013943	70	9·0276958	70	9·0031693	70	8·9541755
71	9·0885570	71	9·0138057	71	8·9889288	71	8·9392352
72	9·0757198	72	8·9999157	72	8·9746884	72	8·9242948
73	9·0628826	73	8·9860256	73	8·9604479	73	8·9093545
74	9·0500454	74	8·9721355	74	8·9462075	74	8·8944141
75	9·0372081	75	8·9582455	75	8·9319671	75	8·8794738
76	9·0243709	76	8·9443554	76	8·9177266	76	8·8645334
77	9·0115337	77	8·9304654	77	8·9034862	77	8·8495931
78	8·9986965	78	8·9165753	78	8·8892457	78	8·8346527
79	8·9858592	79	8·9026852	79	8·8750053	79	8·8197124
80	8·9730220	80	8·8887952	80	8·8607649	80	8·8047720
81	8·9601848	81	8·8749051	81	8·8465244	81	8·7898317
82	8·9473476	82	8·8610151	82	8·8322840	82	8·7748913
83	8·9345103	83	8·8471250	83	8·8180436	83	8·7599510
84	8·9216731	84	8·8332349	84	8·8038031	84	8·7450106
85	8·9088359	85	8·8193449	85	8·7895627	85	8·7300703
86	8·8959987	86	8·8054548	86	8·7753222	86	8·7151299
87	8·8831615	87	8·7915648	87	8·7610818	87	8·7001896
88	8·8703242	88	8·7776747	88	8·7468414	88	8·6852492
89	8·8574870	89	8·7637846	89	8·7326009	89	8·6703089
90	8·8446498	90	8·7498946	90	8·7183605	90	8·6553685
91	8·8318126	91	8·7360045	91	8·7041200	91	8·6404282
92	8·8189753	92	8·7221144	92	8·6898796	92	8·6254878
93	8·8061381	93	8·7082244	93	8·6756392	93	8·6105475
94	8·7933009	94	8·6943343	94	8·6613987	94	8·5956071
95	8·7804637	95	8·6804443	95	8·6471583	95	8·5806668
96	8·7676264	96	8·6665542	96	8·6329178	96	8·5657264
97	8·7547892	97	8·6526641	97	8·6186774	97	8·5507861
98	8·7419520	98	8·6387741	98	8·6044370	98	8·5358457
99	8·7291148	99	8·6248840	99	8·5901965	99	8·5209054
100	8·7162775	100	8·6109940	100	8·5759561	100	8·5059650
101	8·7034403	101	8·5971039	101	8·5617156	101	8·4910247
102	8·6906031	102	8·5832138	102	8·5474752	102	8·4760843
103	8·6777659	103	8·5693238	103	8·5332348	103	8·4611440
104	8·6649286	104	8·5554337	104	8·5189943	104	8·4462036
105	8·6520914	105	8·5415437	105	8·5047539	105	8·4312633
106	8·6392542	106	8·5276536	106	8·4905135	106	8·4163229
107	8·6264170	107	8·5137635	107	8·4762730	107	8·4013826
108	8·6135797	108	8·4998735	108	8·4620326	108	8·3864422
109	8·6007425	109	8·4859834	109	8·4477921	109	8·3715019

Logarithms of the Present Value of £1, payable at the end of every Year, from 1 to 109 Years; **Rates of Interest 3¾, 4, 5, and 6 per Cent.**

λv^x							
Years (x)	**3¾ per cent.**	**Years** (x)	**4 per cent.**	**Years** (x)	**5 per cent.**	**Years** (x)	**6 per cent.**
0	0·0000000	0	0·0000000	0	0·0000000	0	0·0000000
1	9·9840119	1	9·9829667	1	9·9788107	1	9·9746941
2	9·9680238	2	9·9659333	2	9·9576214	2	9·9493883
3	9·9520357	3	9·9489000	3	9·9364321	3	9·9240824
4	9·9360476	4	9·9318666	4	9·9152428	4	9·8987765
5	9·9200595	5	9·9148333	5	9·8940535	5	9·8734707
6	9·9040714	6	9·8978000	6	9·8728642	6	9·8481648
7	9·8880833	7	9·8807666	7	9·8516749	7	9·8228589
8	9·8720952	8	9·8637333	8	9·8304856	8	9·7975531
9	9·8561071	9	9·8466999	9	9·8092963	9	9·7722472
10	9·8401189	10	9·8296666	10	9·7881070	10	9·7469413
11	9·8241308	11	9·8126333	11	9·7669177	11	9·7216355
12	9·8081427	12	9·7955999	12	9·7457284	12	9·6963296
13	9·7921546	13	9·7785666	13	9·7245391	13	9·6710238
14	9·7761665	14	9·7615332	14	9·7033498	14	9·6457179
15	9·7601784	15	9·7444999	15	9·6821605	15	9·6204120
16	9·7441903	16	9·7274666	16	9·6609712	16	9·5951062
17	9·7282022	17	9·7104332	17	9·6397819	17	9·5698003
18	9·7122141	18	9·6933999	18	9·6185926	18	9·5444944
19	9·6962260	19	9·6763666	19	9·5974033	19	9·5191886
20	9·6802379	20	9·6593332	20	9·5762140	20	9·4938827
21	9·6642498	21	9·6422999	21	9·5550247	21	9·4685768
22	9·6482617	22	9·6252665	22	9·5338354	22	9·4432710
23	9·6322736	23	9·6082332	23	9·5126461	23	9·4179651
24	9·6162855	24	9·5911999	24	9·4914568	24	9·3926592
25	9·6002974	25	9·5741665	25	9·4702675	25	9·3673534
26	9·5843093	26	9·5571332	26	9·4490782	26	9·3420475
27	9·5683212	27	9·5400998	27	9·4278889	27	9·3167416
28	9·5523330	28	9·5230665	28	9·4066996	28	9·2914358
29	9·5363449	29	9·5060332	29	9·3855103	29	9·2661299
30	9·5203568	30	9·4889998	30	9·3643210	30	9·2408240
31	9·5043687	31	9·4719665	31	9·3431317	31	9·2155182
32	9·4883806	32	9·4549331	32	9·3219424	32	9·1902123
33	9·4723925	33	9·4378998	33	9·3007531	33	9·1649064
34	9·4564044	34	9·4208665	34	9·2795638	34	9·1396006
35	9·4404163	35	9·4038331	35	9·2583745	35	9·1142947
36	9·4244282	36	9·3867998	36	9·2371852	36	9·0889889
37	9·4084401	37	9·3697664	37	9·2159959	37	9·0636830
38	9·3924520	38	9·3527331	38	9·1948066	38	9·0383771
39	9·3764639	39	9·3356998	39	9·1736173	39	9·0130713
40	9·3604758	40	9·3186664	40	9·1524280	40	8·9877654
41	9·3444877	41	9·3016331	41	9·1312387	41	8·9624595
42	9·3284996	42	9·2845997	42	9·1100494	42	8·9371537
43	9·3125115	43	9·2675664	43	9·0888601	43	8·9118478
44	9·2965234	44	9·2505331	44	9·0676708	44	8·8865419
45	9·2805353	45	9·2334997	45	9·0464815	45	8·8612361
46	9·2645472	46	9·2164664	46	9·0252922	46	8·8359302
47	9·2485590	47	9·1994331	47	9·0041029	47	8·8106243
48	9·2325709	48	9·1823997	48	8·9829136	48	8·7853185
49	9·2165828	49	9·1653664	49	8·9617243	49	8·7600126
50	9·2005947	50	9·1483330	50	8·9405350	50	8·7347067
51	9·1846066	51	9·1312997	51	8·9193457	51	8·7094009
52	9·1686185	52	9·1142664	52	8·8981564	52	8·6840950
53	9·1526304	53	9·0972330	53	8·8769671	53	8·6587891
54	9·1366423	54	9·0801997	54	8·8557779	54	8·6334833

Logarithms of the Present Value of £1, payable at the end of every Year, from 1 to 109 Years; **Rates of Interest $3\frac{3}{4}$, 4, 5, and 6 per Cent.**

$\lambda\ v^x$							
Years (x)	$3\frac{3}{4}$ per cent.	Years (x)	4 per cent.	Years (x)	5 per cent.	Years (x)	6 per cent.
55	9·1206542	55	9·0631663	55	8·8345886	55	8·6081774
56	9·1046661	56	9·0461330	56	8·8133993	56	8·5828715
57	9·0886780	57	9·0290997	57	8·7922100	57	8·5575657
58	9·0726899	58	9·0120663	58	8·7710207	58	8·5322598
59	9·0567018	59	8·9950330	59	8·7498314	59	8·5069539
60	9·0407137	60	8·9779996	60	8·7286421	60	8·4816481
61	9·0247256	61	8·9609663	61	8·7074528	61	8·4563422
62	9·0087375	62	8·9439330	62	8·6862635	62	8·4310364
63	8·9927494	63	8·9268996	63	8·6650742	63	8·4057305
64	8·9767613	64	8·9098663	64	8·6438849	64	8·3804246
65	8·9607732	65	8·8928329	65	8·6226956	65	8·3551188
66	8·9447850	66	8·8757996	66	8·6015063	66	8·3298129
67	8·9287969	67	8·8587663	67	8·5803170	67	8·3045070
68	8·9128088	68	8·8417329	68	8·5591277	68	8·2792012
69	8·8968207	69	8·8246996	69	8·5379384	69	8·2538953
70	8·8808326	70	8·8076662	70	8·5167491	70	8·2285894
71	8·8648445	71	8·7906329	71	8·4955598	71	8·2032836
72	8·8488564	72	8·7735996	72	8·4743705	72	8·1779777
73	8·8328683	73	8·7565662	73	8·4531812	73	8·1526718
74	8·8168802	74	8·7395329	74	8·4319919	74	8·1273660
75	8·8008921	75	8·7224996	75	8·4108026	75	8·1020601
76	8·7849040	76	8·7054662	76	8·3896133	76	8·0767542
77	8·7689159	77	8·6884329	77	8·3684240	77	8·0514484
78	8·7529278	78	8·6713995	78	8·3472347	78	8·0261425
79	8·7369397	79	8·6543662	79	8·3260454	79	8·0008366
80	8·7209516	80	8·6373329	80	8·3048561	80	7·9755308
81	8·7049635	81	8·6202995	81	8·2836668	81	7·9502249
82	8·6889754	82	8·6032662	82	8·2624775	82	7·9249190
83	8·6729873	83	8·5862328	83	8·2412882	83	7·8996132
84	8·6569991	84	8·5691995	84	8·2200989	84	7·8743073
85	8·6410110	85	8·5521662	85	8·1989096	85	7·8490015
86	8·6250229	86	8·5351328	86	8·1777203	86	7·8236956
87	8·6090348	87	8·5180995	87	8·1565310	87	7·7983897
88	8·5930467	88	8·5010661	88	8·1353417	88	7·7730839
89	8·5770586	89	8·4840328	89	8·1141524	89	7·7477780
90	8·5610705	90	8·4669995	90	8·0929631	90	7·7224721
91	8·5450824	91	8·4499661	91	8·0717738	91	7·6971663
92	8·5290943	92	8·4329328	92	8·0505845	92	7·6718604
93	8·5131062	93	8·4158994	93	8·0293952	93	7·6465545
94	8·4971181	94	8·3988661	94	8·0082059	94	7·6212487
95	8·4811300	95	8·3818328	95	7·9870166	95	7·5959428
96	8·4651419	96	8·3647994	96	7·9658273	96	7·5706369
97	8·4491538	97	8·3477661	97	7·9446380	97	7·5453311
98	8·4331657	98	8·3307327	98	7·9234487	98	7·5200252
99	8·4171776	99	8·3136994	99	7·9022594	99	7·4947193
100	8·4011895	100	8·2966661	100	7·8810701	100	7·4694135
101	8·3852014	101	8·2796327	101	7·8598808	101	7·4441076
102	8·3692133	102	8·2625994	102	7·8386915	102	7·4188017
103	8·3532251	103	8·2455661	103	7·8175022	103	7·3934959
104	8·3372370	104	8·2285327	104	7·7963129	104	7·3681900
105	8·3212489	105	8·2114994	105	7·7751236	105	7·3428841
106	8·3052608	106	8·1944660	106	7·7539343	106	7·3175783
107	8·2892727	107	8·1774327	107	7·7327450	107	7·2922724
108	8·2732846	108	8·1603994	108	7·7115557	108	7·2669666
109	8·2572965	109	8·1433660	109	7·6903664	109	7·2416607

Logarithms of the Present Value of £1, payable at the end of every Year, from 1 to 109 Years; **Rates of Interest 7, 8, 9, and 10 per Cent.**

$\lambda\ v^x$

Years (x)	7 per cent.	Years (x)	8 per cent.	Years (x)	9 per cent.	Years (x)	10 per cent.
0	0·0000000	0	0·0000000	0	0·0000000	0	0·0000000
1	9·9706162	1	9·9665762	1	9·9625735	1	9·9586073
2	9·9412324	2	9·9331525	2	9·9251470	2	9·9172146
3	9·9118487	3	9·8997287	3	9·8877205	3	9·8758219
4	9·8824649	4	9·8663050	4	9·8502940	4	9·8344293
5	9·8530811	5	9·8328812	5	9·8128675	5	9·7930366
6	9·8236973	6	9·7994575	6	9·7754410	6	9·7516439
7	9·7943136	7	9·7660337	7	9·7380145	7	9·7102512
8	9·7649298	8	9·7326100	8	9·7005880	8	9·6688585
9	9·7355460	9	9·6991862	9	9·6631615	9	9·6274658
10	9·7061622	10	9·6657624	10	9·6257350	10	9·5860731
11	9·6767784	11	9·6323387	11	9·5883085	11	9·5446805
12	9·6473947	12	9·5989149	12	9·5508820	12	9·5032878
13	9·6180109	13	9·5654912	13	9·5134555	13	9·4618951
14	9·5886271	14	9·5320674	14	9·4760290	14	9·4205024
15	9·5592433	15	9·4986437	15	9·4386025	15	9·3791097
16	9·5298596	16	9·4652199	16	9·4011760	16	9·3377170
17	9·5004758	17	9·4317962	17	9·3637495	17	9·2963244
18	9·4710920	18	9·3983724	18	9·3263230	18	9·2549317
19	9·4417082	19	9·3649486	19	9·2888965	19	9·2135390
20	9·4123244	20	9·3315249	20	9·2514700	20	9·1721463
21	9·3829407	21	9·2981011	21	9·2140435	21	9·1307536
22	9·3535569	22	9·2646774	22	9·1766170	22	9·0893609
23	9·3241731	23	9·2312536	23	9·1391905	23	9·0479682
24	9·2947893	24	9·1978299	24	9·1017640	24	9·0065756
25	9·2654056	25	9·1644061	25	9·0643376	25	8·9651829
26	9·2360218	26	9·1309824	26	9·0269111	26	8·9237902
27	9·2066380	27	9·0975586	27	8·9894846	27	8·8823975
28	9·1772542	28	9·0641348	28	8·9520581	28	8·8410048
29	9·1478704	29	9·0307111	29	8·9146316	29	8·7996121
30	9·1184867	30	8·9972873	30	8·8772051	30	8·7582194
31	9·0891029	31	8·9638636	31	8·8397786	31	8·7168268
32	9·0597191	32	8·9304398	32	8·8023521	32	8·6754341
33	9·0303353	33	8·8970161	33	8·7649256	33	8·6340414
34	9·0009516	34	8·8635923	34	8·7274991	34	8·5926487
35	8·9715678	35	8·8301686	35	8·6900726	35	8·5512560
36	8·9421840	36	8·7967448	36	8·6526461	36	8·5098633
37	8·9128002	37	8·7633210	37	8·6152196	37	8·4684706
38	8·8834164	38	8·7298973	38	8·5777931	38	8·4270780
39	8·8540327	39	8·6964735	39	8·5403666	39	8·3856853
40	8·8246489	40	8·6630498	40	8·5029401	40	8·3442926
41	8·7952651	41	8·6296260	41	8·4655136	41	8·3028999
42	8·7658813	42	8·5962023	42	8·4280871	42	8·2615072
43	8·7364976	43	8·5627785	43	8·3906606	43	8·2201145
44	8·7071138	44	8·5293548	44	8·3532341	44	8·1787219
45	8·6777300	45	8·4959310	45	8·3158076	45	8·1373292
46	8·6483462	46	8·4625072	46	8·2783811	46	8·0959365
47	8·6189624	47	8·4290835	47	8·2409546	47	8·0545438
48	8·5895787	48	8·3956597	48	8·2035281	48	8·0131511
49	8·5601949	49	8·3622360	49	8·1661016	49	7·9717584
50	8·5308111	50	8·3288122	50	8·1286751	50	7·9303657
51	8·5014273	51	8·2953885	51	8·0912486	51	7·8889731
52	8·4720436	52	8·2619647	52	8·0538221	52	7·8475804
53	8·4426598	53	8·2285410	53	8·0163956	53	7·8061877
54	8·4132760	54	8·1951172	54	7·9789691	54	7·7647950

Logarithms of the Present Value of £1, payable at the end of every Year, from 1 to 109 Years; **Rates of Interest 7, 8, 9, and 10 per Cent.**

$\lambda\ v^x$							
Years (x)	**7 per cent.**	**Years** (x)	**8 per cent.**	**Years** (x)	**9 per cent.**	**Years** (x)	**10 per cent.**
55	8·3838922	55	8·1616934	55	7·9415426	55	7·7234023
56	8·3545084	56	8·1282697	56	7·9041161	56	7·6820096
57	8·3251247	57	8·0948459	57	7·8666896	57	7·6406169
58	8·2957409	58	8·0614222	58	7·8292631	58	7·5992243
59	8·2663571	59	8·0279984	59	7·7918366	59	7·5578316
60	8·2369733	60	7·9945747	60	7·7544101	60	7·5164389
61	8·2075896	61	7·9611509	61	7·7169836	61	7·4750462
62	8·1782058	62	7·9277272	62	7·6795571	62	7·4336535
63	8·1488220	63	7·8943034	63	7·6421306	63	7·3922608
64	8·1194382	64	7·8608796	64	7·6047041	64	7·3508681
65	8·0900545	65	7·8274559	65	7·5672776	65	7·3094755
66	8·0606707	66	7·7940321	66	7·5298511	66	7·2680828
67	8·0312869	67	7·7606084	67	7·4924246	67	7·2266901
68	8·0019031	68	7·7271846	68	7·4549981	68	7·1852974
69	7·9725193	69	7·6937609	69	7·4175716	69	7·1439047
70	7·9431356	70	7·6603371	70	7·3801451	70	7·1025120
71	7·9137518	71	7·6269134	71	7·3427186	71	7·0611194
72	7·8843680	72	7·5934896	72	7·3052921	72	7·0197267
73	7·8549842	73	7·5600658	73	7·2678657	73	6·9783340
74	7·8256005	74	7·5266421	74	7·2304392	74	6·9369413
75	7·7962167	75	7·4932183	75	7·1930127	75	6·8955486
76	7·7668329	76	7·4597946	76	7·1555862	76	6·8541559
77	7·7374491	77	7·4263708	77	7·1181597	77	6·8127632
78	7·7080653	78	7·3929471	78	7·0807332	78	6·7713706
79	7·6786816	79	7·3595233	79	7·0433067	79	6·7299779
80	7·6492978	80	7·3260996	80	7·0058802	80	6·6885852
81	7·6199140	81	7·2926758	81	6·9684537	81	6·6471925
82	7·5905302	82	7·2592521	82	6·9310272	82	6·6057998
83	7·5611465	83	7·2258283	83	6·8936007	83	6·5644071
84	7·5317627	84	7·1924045	84	6·8561742	84	6·5230144
85	7·5023789	85	7·1589808	85	6·8187477	85	6·4816218
86	7·4729951	86	7·1255570	86	6·7813212	86	6·4402291
87	7·4436113	87	7·0921333	87	6·7438947	87	6·3988364
88	7·4142276	88	7·0587095	88	6·7064682	88	6·3574437
89	7·3848438	89	7·0252858	89	6·6690417	89	6·3160510
90	7·3554600	90	6·9918620	90	6·6316152	90	6·2746583
91	7·3260762	91	6·9584383	91	6·5941887	91	6·2332657
92	7·2966925	92	6·9250145	92	6·5567622	92	6·1918730
93	7·2673087	93	6·8915907	93	6·5193357	93	6·1504803
94	7·2379249	94	6·8581670	94	6·4819092	94	6·1090876
95	7·2085411	95	6·8247432	95	6·4444827	95	6·0676949
96	7·1791573	96	6·7913195	96	6·4070562	96	6·0263022
97	7·1497736	97	6·7578957	97	6·3696297	97	5·9849095
98	7·1203898	98	6·7244720	98	6·3322032	98	5·9435169
99	7·0910060	99	6·6910482	99	6·2947767	99	5·9021242
100	7·0616222	100	6·6576245	100	6·2573502	100	5·8607315
101	7·0322385	101	6·6242007	101	6·2199237	101	5·8193388
102	7·0028547	102	6·5907769	102	6·1824972	102	5·7779461
103	6·9734709	103	6·5573532	103	6·1450707	103	5·7365534
104	6·9440871	104	6·5239294	104	6·1076442	104	5·6951607
105	6·9147033	105	6·4905057	105	6·0702177	105	5·6537681
106	6·8853196	106	6·4570819	106	6·0327912	106	5·6123754
107	6·8559358	107	6·4236582	107	5·9953647	107	5·5709827
108	6·8265520	108	6·3902344	108	5·9579382	108	5·5295900
109	6·7971682	109	6·3568107	109	5·9205117	109	5·4881973

Present Value of £1, payable at the end of every Year, from 1 to 109 Years; Rates of Interest 3, 3¼, 3⅓, 3½, 3¾, and 4 per Cent.

			v^x *				
Years (x)	3 per cent.	3¼ per cent.	3⅓ per cent.	3½ per cent.	3¾ per cent.	4 per cent.	Years (x)
0	1·000000	1·000000	1·000000	1·000000	1·000000	1·000000	0
1	·970874	·968523	·967742	·966184	·963855	·961538	1
2	·942596	·938037	·936524	·933511	·929017	·924556	2
3	·915142	·908510	·906314	·901943	·895438	·888996	3
4	·888487	·879913	·877078	·871442	·863073	·854804	4
5	·862609	·852216	·848785	·841973	·831878	·821927	5
6	·837484	·825391	·821405	·813501	·801810	·790315	6
7	·813092	·799410	·794908	·785991	·772829	·759918	7
8	·789409	·774247	·769266	·759412	·744895	·730690	8
9	·766417	·749876	·744451	·733731	·717971	·702587	9
10	·744094	·726272	·720436	·708919	·692020	·675564	10
11	·722421	·703411	·697196	·684946	·667008	·649581	11
12	·701380	·681270	·674706	·661783	·642899	·624597	12
13	·680951	·659826	·652941	·639404	·619662	·600574	13
14	·661118	·639056	·631879	·617782	·597264	·577475	14
15	·641862	·618941	·611496	·596891	·575676	·555265	15
16	·623167	·599458	·591770	·576706	·554869	·533908	16
17	·605016	·580589	·572681	·557204	·534813	·513373	17
18	·587395	·562314	·554207	·538361	·515483	·493628	18
19	·570286	·544614	·536329	·520156	·496851	·474642	19
20	·553676	·527471	·519028	·502566	·478892	·456387	20
21	·537549	·510868	·502286	·485571	·461583	·438834	21
22	·521893	·494787	·486083	·469151	·444899	·421955	22
23	·506692	·479213	·470403	·453286	·428819	·405726	23
24	·491934	·464129	·455229	·437957	·413319	·390121	24
25	·477606	·449520	·440514	·423147	·398380	·375117	25
26	·463695	·435370	·426333	·408838	·383981	·360689	26
27	·450189	·421666	·412580	·395012	·370102	·346817	27
28	·437077	·408393	·399271	·381654	·356725	·333477	28
29	·424346	·395558	·386391	·368748	·343831	·320651	29
30	·411987	·383088	·373927	·356278	·331403	·308319	30
31	·399987	·371029	·361865	·344230	·319425	·296460	31
32	·388337	·359350	·350192	·332590	·307879	·285058	32
33	·377026	·348039	·338895	·321343	·296751	·274094	33
34	·366045	·337084	·327963	·310476	·286025	·263552	34
35	·355383	·326473	·317384	·299977	·275687	·253415	35
36	·345032	·316197	·307145	·289833	·265722	·243669	36
37	·334983	·306244	·297238	·280032	·256118	·234297	37
38	·325226	·296604	·287649	·270562	·246861	·225285	38
39	·315754	·287268	·278370	·261413	·237938	·216621	39
40	·306557	·278226	·269391	·252572	·229338	·208289	40
41	·297628	·269468	·260701	·244031	·221049	·200278	41
42	·288959	·260986	·252291	·235779	·213059	·192575	42
43	·280543	·252771	·244152	·227806	·205358	·185168	43
44	·272372	·244815	·236277	·220102	·197935	·178046	44
45	·264439	·237109	·228655	·212659	·190781	·171198	45
46	·256737	·229645	·221279	·205468	·183885	·164614	46
47	·249259	·222417	·214141	·198520	·177239	·158283	47
48	·241999	·215416	·207233	·191806	·170833	·152195	48
49	·234950	·208635	·200548	·185320	·164658	·146341	49
50	·228107	·202068	·194079	·179053	·158707	·140713	50
51	·221463	·195707	·187818	·172998	·152970	·135301	51
52	·215013	·189547	·181760	·167148	·147441	·130097	52
53	·208750	·183581	·175896	·161496	·142112	·125093	53
54	·202670	·177802	·170222	·156035	·136975	·120282	54

* See Note at page 20.

Present Value of £1, payable at the end of every Year, from 1 to 109 Years; Rates of Interest 3, $3\frac{1}{4}$, $3\frac{1}{3}$, $3\frac{1}{2}$, $3\frac{3}{4}$, and 4 per Cent.

v^x

Years (x)	3 per cent.	$3\frac{1}{4}$ per cent.	$3\frac{1}{3}$ per cent.	$3\frac{1}{2}$ per cent.	$3\frac{3}{4}$ per cent.	4 per cent.	Years (x)
55	·196767	·172205	·164731	·150758	·132024	·115656	55
56	·191036	·166785	·159417	·145660	·127252	·111207	56
57	·185472	·161535	·154275	·140734	·122653	·106930	57
58	·180070	·156450	·149298	·135975	·118220	·102817	58
59	·174825	·151526	·144482	·131377	·113947	·098863	59
60	·169733	·146756	·139821	·126934	·109828	·095060	60
61	·164789	·142137	·135311	·122642	·105858	·091404	61
62	·159990	·137663	·130946	·118495	·102032	·087889	62
63	·155330	·133329	·126722	·114487	·098344	·084508	63
64	·150806	·129133	·122634	·110616	·094790	·081258	64
65	·146413	·125068	·118678	·106875	·091364	·078133	65
66	·142149	·121131	·114850	·103261	·088061	·075128	66
67	·138009	·117318	·111145	·099769	·084878	·072238	67
68	·133989	·113625	·107560	·096395	·081810	·069460	68
69	·130086	·110049	·104090	·093136	·078853	·066788	69
70	·126297	·106585	·100732	·089986	·076003	·064219	70
71	·122619	·103230	·097483	·086943	·073256	·061749	71
72	·119047	·099981	·094338	·084003	·070608	·059374	72
73	·115580	·096833	·091295	·081162	·068056	·057091	73
74	·112214	·093785	·088350	·078418	·065596	·054895	74
75	·108945	·090833	·085500	·075766	·063225	·052784	75
76	·105772	·087974	·082742	·073204	·060940	·050754	76
77	·102691	·085205	·080073	·070728	·058738	·048801	77
78	·099700	·082523	·077490	·068337	·056615	·046924	78
79	·096796	·079925	·074990	·066026	·054568	·045120	79
80	·093977	·077410	·072571	·063793	·052596	·043384	80
81	·091240	·074973	·070230	·061636	·050695	·041716	81
82	·088582	·072613	·067965	·059551	·048862	·040111	82
83	·086002	·070327	·065772	·057538	·047096	·038569	83
84	·083497	·068114	·063651	·055592	·045394	·037085	84
85	·081065	·065970	·061597	·053712	·043753	·035659	85
86	·078704	·063893	·059610	·051896	·042172	·034287	86
87	·076412	·061882	·057688	·050141	·040648	·032969	87
88	·074186	·059934	·055827	·048445	·039178	·031701	88
89	·072026	·058048	·054026	·046807	·037762	·030481	89
90	·069928	·056220	·052283	·045224	·036397	·029309	90
91	·067891	·054451	·050596	·043695	·035082	·028182	91
92	·065914	·052737	·048964	·042217	·033814	·027098	92
93	·063994	·051077	·047385	·040789	·032592	·026056	93
94	·062130	·049469	·045856	·039410	·031414	·025053	94
95	·060320	·047912	·044377	·038077	·030278	·024090	95
96	·058563	·046404	·042946	·036790	·029184	·023163	96
97	·056858	·044943	·041560	·035546	·028129	·022272	97
98	·055202	·043529	·040220	·034344	·027112	·021416	98
99	·053594	·042158	·038922	·033182	·026132	·020592	99
100	·052033	·040831	·037667	·032060	·025188	·019800	100
101	·050517	·039546	·036452	·030976	·024277	·019039	101
102	·049046	·038301	·035276	·029928	·023400	·018306	102
103	·047617	·037096	·034138	·028916	·022554	·017602	103
104	·046231	·035928	·033037	·027939	·021739	·016925	104
105	·044884	·034797	·031971	·026994	·020953	·016274	105
106	·043577	·033702	·030940	·026081	·020196	·015648	106
107	·042307	·032641	·029941	·025199	·019466	·015046	107
108	·041075	·031614	·028976	·024347	·018762	·014468	108
109	·039879	·030618	·028041	·023523	·018084	·013911	109

Present Value of **£1**, payable at the end of every Year, from 1 to 109 Years; Rates of Interest 5, 6, 7, 8, 9, and 10 per Cent.

v^x							
Years (x)	5 per cent.	6 per cent.	7 per cent.	8 per cent.	9 per cent.	10 per cent.	Years (x)
0	1·000000	1·000000	1·000000	1·000000	1·000000	1·000000	0
1	·952381	·943396	·934579	·925926	·917431	·909091	1
2	·907029	·889996	·873439	·857339	·841680	·826446	2
3	·863838	·839619	·816298	·793832	·772183	·751315	3
4	·822702	·792094	·762895	·735030	·708425	·683013	4
5	·783526	·747258	·712986	·680583	·649931	·620921	5
6	·746215	·704961	·666342	·630170	·596267	·564474	6
7	·710681	·665057	·622750	·583490	·547034	·513158	7
8	·676839	·627412	·582009	·540269	·501866	·466507	8
9	·644609	·591898	·543934	·500249	·460428	·424098	9
10	·613913	·558395	·508349	·463193	·422411	·385543	10
11	·584679	·526788	·475093	·428883	·387533	·350494	11
12	·556837	·496969	·444012	·397114	·355535	·318631	12
13	·530321	·468839	·414964	·367698	·326179	·289664	13
14	·505068	·442301	·387817	·340461	·299246	·263331	14
15	·481017	·417265	·362446	·315242	·274538	·239392	15
16	·458112	·393646	·338735	·291890	·251870	·217629	16
17	·436297	·371364	·316574	·270269	·231073	·197845	17
18	·415521	·350344	·295864	·250249	·211994	·179859	18
19	·395734	·330513	·276508	·231712	·194490	·163508	19
20	·376889	·311805	·258419	·214548	·178431	·148644	20
21	·358942	·294155	·241513	·198656	·163698	·135131	21
22	·341850	·277505	·225713	·183941	·150182	·122846	22
23	·325571	·261797	·210947	·170315	·137781	·111678	23
24	·310068	·246979	·197147	·157699	·126405	·101526	24
25	·295303	·232999	·184249	·146018	·115968	·092296	25
26	·281241	·219810	·172195	·135202	·106393	·083905	26
27	·267848	·207368	·160930	·125187	·097608	·076278	27
28	·255094	·195630	·150402	·115914	·089548	·069343	28
29	·242946	·184557	·140563	·107328	·082155	·063039	29
30	·231377	·174110	·131367	·099377	·075371	·057309	30
31	·220359	·164255	·122773	·092016	·069148	·052099	31
32	·209866	·154957	·114741	·085200	·063438	·047362	32
33	·199873	·146186	·107235	·078889	·058200	·043057	33
34	·190355	·137912	·100219	·073045	·053395	·039143	34
35	·181290	·130105	·093663	·067635	·048986	·035584	35
36	·172657	·122741	·087535	·062625	·044941	·032349	36
37	·164436	·115793	·081809	·057986	·041231	·029408	37
38	·156605	·109239	·076457	·053690	·037826	·026735	38
39	·149148	·103056	·071455	·049713	·034703	·024304	39
40	·142046	·097222	·066780	·046031	·031838	·022095	40
41	·135282	·091719	·062412	·042621	·029209	·020086	41
42	·128840	·086527	·058329	·039464	·026797	·018260	42
43	·122704	·081630	·054513	·036541	·024584	·016600	43
44	·116861	·077009	·050946	·033834	·022555	·015091	44
45	·111297	·072650	·047613	·031328	·020692	·013719	45
46	·105997	·068538	·044499	·029007	·018984	·012472	46
47	·100949	·064658	·041587	·026859	·017416	·011338	47
48	·096142	·060998	·038867	·024869	·015978	·010307	48
49	·091564	·057546	·036324	·023027	·014659	·009370	49
50	·087204	·054288	·033948	·021321	·013449	·008519	50
51	·083051	·051215	·031727	·019742	·012338	·007744	51
52	·079096	·048316	·029651	·018280	·011319	·007040	52
53	·075330	·045582	·027711	·016925	·010385	·006400	53
54	·071743	·043001	·025899	·015672	·009527	·005818	54

Present Value of £1, payable at the end of every Year, from 1 to 109 Years; Rates of Interest 5, 6, 7, 8, 9, and 10 per Cent.

	v^x						
Years (x)	**5 per cent.**	**6 per cent.**	**7 per cent.**	**8 per cent.**	**9 per cent.**	**10 per cent.**	**Years** (x)
55	·068326	·040567	·024204	·014511	·008741	·005289	55
56	·065073	·038271	·022621	·013436	·008019	·004809	56
57	·061974	·036105	·021141	·012441	·007357	·004371	57
58	·059023	·034061	·019758	·011519	·006749	·003974	58
59	·056212	·032133	·018465	·010666	·006192	·003613	59
60	·053536	·030314	·017257	·009876	·005681	·003284	60
61	·050986	·028598	·016128	·009144	·005212	·002986	61
62	·048558	·026980	·015073	·008467	·004781	·002714	62
63	·046246	·025453	·014087	·007840	·004387	·002468	63
64	·044044	·024012	·013166	·007259	·004024	·002243	64
65	·041946	·022653	·012304	·006721	·003692	·002039	65
66	·039949	·021370	·011499	·006223	·003387	·001854	66
67	·038047	·020161	·010747	·005762	·003108	·001685	67
68	·036235	·019020	·010044	·005336	·002851	·001532	68
69	·034509	·017943	·009387	·004940	·002616	·001393	69
70	·032866	·016927	·008773	·004574	·002400	·001266	70
71	·031301	·015969	·008199	·004236	·002202	·001151	71
72	·029811	·015065	·007662	·003922	·002020	·001046	72
73	·028391	·014213	·007161	·003631	·001853	·000951	73
74	·027039	·013408	·006693	·003362	·001700	·000865	74
75	·025752	·012649	·006255	·003113	·001560	·000786	75
76	·024525	·011933	·005846	·002883	·001431	·000715	76
77	·023357	·011258	·005463	·002669	·001313	·000650	77
78	·022245	·010620	·005106	·002471	·001204	·000591	78
79	·021186	·010019	·004772	·002288	·001105	·000537	79
80	·020177	·009452	·004460	·002119	·001014	·000488	80
81	·019216	·008917	·004168	·001962	·000930	·000444	81
82	·018301	·008412	·003895	·001817	·000853	·000403	82
83	·017430	·007936	·003640	·001682	·000783	·000367	83
84	·016600	·007487	·003402	·001557	·000718	·000333	84
85	·015809	·007063	·003180	·001442	·000659	·000303	85
86	·015056	·006663	·002972	·001335	·000604	·000276	86
87	·014339	·006286	·002777	·001236	·000554	·000251	87
88	·013657	·005930	·002596	·001145	·000509	·000228	88
89	·013006	·005595	·002426	·001060	·000467	·000207	89
90	·012387	·005278	·002267	·000981	·000428	·000188	90
91	·011797	·004979	·002119	·000909	·000393	·000171	91
92	·011235	·004697	·001980	·000841	·000360	·000156	92
93	·010700	·004432	·001851	·000779	·000331	·000141	93
94	·010191	·004181	·001730	·000721	·000303	·000129	94
95	·009705	·003944	·001616	·000668	·000278	·000117	95
96	·009243	·003721	·001511	·000618	·000255	·000106	96
97	·008803	·003510	·001412	·000573	·000234	·000097	97
98	·008384	·003312	·001319	·000530	·000215	·000088	98
99	·007985	·003124	·001233	·000491	·000197	·000080	99
100	·007604	·002947	·001152	·000455	·000181	·000073	100
101	·007242	·002780	·001077	·000421	·000166	·000066	101
102	·006897	·002623	·001007	·000390	·000152	·000060	102
103	·006569	·002475	·000941	·000361	·000140	·000055	103
104	·006256	·002334	·000879	·000334	·000128	·000050	104
105	·005958	·002202	·000822	·000309	·000118	·000045	105
106	·005675	·002078	·000768	·000287	·000108	·000041	106
107	·005404	·001960	·000718	·000265	·000099	·000037	107
108	·005147	·001849	·000671	·000246	·000091	·000034	108
109	·004902	·001744	·000627	·000227	·000083	·000031	109

Present Value of £1 per Annum, payable at the end of every Year, for any Number of Years not exceeding 109; **Rates of Interest 3, $3\frac{1}{4}$, $3\frac{1}{3}$, $3\frac{1}{2}$, $3\frac{3}{4}$, and 4 per Cent.**

$$V_x - 1^* = v^1 + v^2 + v^3 \ldots\ldots + v^x.$$

Years (x)	3 per cent.	$3\frac{1}{4}$ per cent.	$3\frac{1}{3}$ per cent.	$3\frac{1}{2}$ per cent.	$3\frac{3}{4}$ per cent.	4 per cent.	Years (x)
0	·000000	·000000	·000000	·000000	·000000	·000000	0
1	·970874	·968523	·967742	·966184	·963855	·961538	1
2	1·913470	1·906560	1·904266	1·899694	1·892872	1·886095	2
3	2·828611	2·815070	2·810580	2·801637	2·788310	2·775091	3
4	3·717098	3·694983	3·687658	3·673079	3·651383	3·629895	4
5	4·579707	4·547199	4·536443	4·515052	4·483261	4·451822	5
6	5·417191	5·372590	5·357848	5·328553	5·285071	5·242137	6
7	6·230283	6·172000	6·152756	6·114544	6·057900	6·002055	7
8	7·019692	6·946247	6·922022	6·873956	6·802795	6·732745	8
9	7·786109	7·696123	7·666473	7·607687	7·520766	7·435332	9
10	8·530203	8·422395	8·386909	8·316605	8·212786	8·110896	10
11	9·252624	9·125806	9·084105	9·001551	8·879794	8·760477	11
12	9·954004	9·807076	9·758811	9·663334	9·522693	9·385074	12
13	10·634955	10·466902	10·411752	10·302738	10·142355	9·985648	13
14	11·296073	11·105958	11·043631	10·920520	10·739619	10·563123	14
15	11·937935	11·724899	11·655127	11·517411	11·315295	11·118387	15
16	12·561102	12·324357	12·246897	12·094117	11·870164	11·652296	16
17	13·166118	12·904946	12·819578	12·651321	12·404977	12·165669	17
18	13·753513	13·467260	13·373785	13·189682	12·920460	12·659297	18
19	14·323799	14·011874	13·910114	13·709837	13·417311	13·133939	19
20	14·877475	14·539345	14·429142	14·212403	13·896203	13·590326	20
21	15·415024	15·050213	14·931428	14·697974	14·357786	14·029160	21
22	15·936917	15·545000	15·417511	15·167125	14·802685	14·451115	22
23	16·443608	16·024213	15·887914	15·620410	15·231504	14·856842	23
24	16·935542	16·488342	16·343143	16·058368	15·644823	15·246963	24
25	17·413148	16·937862	16·783687	16·481515	16·043203	15·622080	25
26	17·876842	17·373232	17·210020	16·890352	16·427184	15·982769	26
27	18·327031	17·794898	17·622600	17·285365	16·797286	16·329586	27
28	18·764108	18·203291	18·021871	17·667019	17·154011	16·663063	28
29	19·188455	18·598829	18·408262	18·035767	17·497842	16·983715	29
30	19·600441	18·981917	18·782189	18·392045	17·829245	17·292033	30
31	20·000428	19·352946	19·144054	18·736276	18·148670	17·588494	31
32	20·388766	19·712296	19·494246	19·068865	18·456549	17·873552	32
33	20·765792	20·060335	19·833141	19·390208	18·753300	18·147646	33
34	21·131837	20·397419	20·161104	19·700684	19·039325	18·411198	34
35	21·487220	20·723892	20·478488	20·000661	19·315012	18·664613	35
36	21·832252	21·040089	20·785633	20·290494	19·580734	18·908282	36
37	22·167235	21·346333	21·082871	20·570525	19·836852	19·142579	37
38	22·492462	21·642937	21·370520	20·841087	20·083713	19·367864	38
39	22·808215	21·930205	21·648890	21·102500	20·321651	19·584485	39
40	23·114772	22·208431	21·918281	21·355072	20·550989	19·792774	40
41	23·412400	22·477899	22·178982	21·599104	20·772038	19·993052	41
42	23·701359	22·738885	22·431273	21·834883	20·985097	20·185627	42
43	23·981902	22·991656	22·675425	22·062689	21·190455	20·370795	43
44	24·254274	23·236471	22·911702	22·282791	21·388390	20·548841	44
45	24·518713	23·473580	23·140357	22·495450	21·579171	20·720040	45
46	24·775449	23·703225	23·361636	22·700918	21·763056	20·884654	46
47	25·024708	23·925642	23·575777	22·899438	21·940295	21·042936	47
48	25·266707	24·141058	23·783010	23·091244	22·111128	21·195131	48
49	25·501657	24·349693	23·983558	23·276564	22·275786	21·341472	49
50	25·729764	24·551761	24·177637	23·455618	22·434493	21·482185	50
51	25·951227	24·747468	24·365455	23·628616	22·587463	21·617485	51
52	26·166240	24·937015	24·547215	23·795765	22·734904	21·747582	52
53	26·374990	25·120596	24·723111	23·957260	22·877016	21·872675	53
54	26·577660	25·298398	24·893333	24·113295	23·013991	21·992957	54

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* **Note.**—The $V_x - 1$ for all the Rates excepting $3\frac{1}{4}$, $3\frac{1}{3}$, and $3\frac{3}{4}$, is compiled from Smart's Tables from 0 to 100 years; for the years 101 to 109, and for the Rates $3\frac{1}{4}$, $3\frac{1}{3}$, and $3\frac{3}{4}$, the $V_x - 1$ is obtained by the addition of the successive values of v^x.

Present Value of £1 per Annum, payable at the end of every Year, for any Number of Years not exceeding 109 ; **Rates of Interest 3, $3\frac{1}{4}$, $3\frac{1}{3}$, $3\frac{1}{2}$, $3\frac{3}{4}$, and 4 per Cent.**

$$V_x - 1 = v^1 + v^2 + v^3 \ldots\ldots + v^x.$$

Years (x)	3 per cent.	$3\frac{1}{4}$ per cent.	$3\frac{1}{3}$ per cent.	$3\frac{1}{2}$ per cent.	$3\frac{3}{4}$ per cent.	4 per cent.	Years (x)
55	26·774428	25·470603	25·058064	24·264053	23·146015	22·108612	55
56	26·965464	25·637388	25·217481	24·409713	23·273267	22·219819	56
57	27·150936	25·798923	25·371756	24·550448	23·395920	22·326749	57
58	27·331005	25·955373	25·521054	24·686423	23·514140	22·429567	58
59	27·505831	26·106899	25·665536	24·817800	23·628087	22·528430	59
60	27·675564	26·253655	25·805357	24·944734	23·737915	22·623490	60
61	27·840353	26·395792	25·940668	25·067376	23·843773	22·714894	61
62	28·000343	26·533455	26·071614	25·185870	23·945805	22·802783	62
63	28·155673	26·666784	26·198336	25·300358	24·044149	22·887291	63
64	28·306478	26·795917	26·320970	25·410974	24·138939	22·968549	64
65	28·452891	26·920985	26·439648	25·517849	24·230303	23·046682	65
66	28·595040	27·042116	26·554498	25·621110	24·318364	23·121810	66
67	28·733049	27·159434	26·665643	25·720880	24·403242	23·194048	67
68	28·867038	27·273059	26·773203	25·817275	24·485052	23·263507	68
69	28·997124	27·383108	26·877293	25·910411	24·563905	23·330296	69
70	29·123421	27·489693	26·978025	26·000397	24·639908	23·394515	70
71	29·246040	27·592923	27·075508	26·087340	24·713164	23·456264	71
72	29·365087	27·692904	27·169846	26·171343	24·783772	23·515639	72
73	29·480667	27·789737	27·261141	26·252505	24·851828	23·572730	73
74	29·592881	27·883522	27·349491	26·330923	24·917424	23·627625	74
75	29·701826	27·974355	27·434991	26·406689	24·980649	23·680408	75
76	29·807598	28·062329	27·517733	26·479892	25·041589	23·731162	76
77	29·910290	28·147534	27·597806	26·550621	25·100327	23·779963	77
78	30·009990	28·230057	27·675296	26·618957	25·156942	23·826888	78
79	30·106786	28·309982	27·750286	26·684983	25·211510	23·872008	79
80	30·200763	28·387392	27·822857	26·748776	25·264106	23·915392	80
81	30·292003	28·462365	27·893087	26·810411	25·314801	23·957108	81
82	30·380586	28·534978	27·961052	26·869963	25·363663	23·997219	82
83	30·466588	28·605305	28·026824	26·927500	25·410759	24·035787	83
84	30·550086	28·673419	28·090475	26·983092	25·456153	24·072872	84
85	30·631151	28·739389	28·152072	27·036804	25·499906	24·108531	85
86	30·709855	28·803282	28·211682	27·088699	25·542078	24·142818	86
87	30·786267	28·865164	28·269370	27·138840	25·582726	24·175787	87
88	30·860454	28·925098	28·325197	27·187285	25·621904	24·207487	88
89	30·932479	28·983146	28·379223	27·234092	25·659666	24·237969	89
90	31·002407	29·039366	28·431506	27·279316	25·696063	24·267278	90
91	31·070298	29·093817	28·482102	27·323010	25·731145	24·295459	91
92	31·136212	29·146554	28·531066	27·365227	25·764959	24·322557	92
93	31·200206	29·197631	28·578451	27·406017	25·797551	24·348612	93
94	31·262336	29·247100	28·624307	27·445427	25·828965	24·373666	94
95	31·322656	29·295012	28·668684	27·483504	25·859243	24·397756	95
86	31·381219	29·341416	28·711630	27·520294	25·888427	24·420919	96
97	31·438077	29·386359	28·753190	27·555839	25·916556	24·443191	97
98	31·493279	29·429888	28·793410	27·590183	25·943668	24·464607	98
99	31·546872	29·472046	28·832333	27·623365	25·969800	24·485199	99
100	31·598905	29·512877	28·869999	27·655425	25·994988	24·504999	100
101	31·649422	29·552423	28·906451	27·686401	26·019265	24·524038	101
102	31·698468	29·590724	28·941727	27·716329	26·042665	24·542344	102
103	31·746085	29·627820	28·975865	27·745245	26·065219	24·559946	103
104	31·792316	29·663748	29·008902	27·773184	26·086958	24·576871	104
105	31·837200	29·698545	29·040873	27·800178	26·107911	24·593145	105
106	31·880777	29·732247	29·071813	27·826259	26·128107	24·608793	106
107	31·923084	29·764888	29·101754	27·851458	26·147573	24·623839	107
108	31·964159	29·796502	29·130730	27·875805	26·166335	24·638307	108
109	32·004038	29·827120	29·158771	27·899328	26·184419	24·652218	109

Present Value of £1 per Annum, payable at the end of every Year, for any Number of Years not exceeding 109; **Rates of Interest 5, 6, 7, 8, 9, and 10 per Cent.**

$V_x - 1.$

Years (x)	5 per cent.	6 per cent.	7 per cent.	8 per cent.	9 per cent.	10 per cent.	Years (x)
0	·000000	·000000	·000000	·000000	·000000	·000000	0
1	·952381	·943396	·934579	·925926	·917431	·909091	1
2	1·859410	1·833393	1·808018	1·783265	1·759111	1·735537	2
3	2·723248	2·673012	2·624316	2·577097	2·531295	2·486852	3
4	3·545951	3·465106	3·387211	3·312127	3·239720	3·169865	4
5	4·329477	4·212364	4·100197	3·992710	3·889651	3·790787	5
6	5·075692	4·917324	4·766540	4·622880	4·485919	4·355261	6
7	5·786373	5·582381	5·389289	5·206370	5·032953	4·868419	7
8	6·463213	6·209794	5·971299	5·746639	5·534819	5·334926	8
9	7·107822	6·801692	6·515232	6·246888	5·995247	5·759024	9
10	7·721735	7·360087	7·023582	6·710081	6·417658	6·144567	10
11	8·306414	7·886875	7·498674	7·138964	6·805191	6·495061	11
12	8·863252	8·383844	7·942686	7·536078	7·160725	6·813692	12
13	9·393573	8·852683	8·357651	7·903776	7·486904	7·103356	13
14	9·898641	9·294984	8·745468	8·244237	7·786150	7·366687	14
15	10·379658	9·712249	9·107914	8·559479	8·060688	7·606080	15
16	10·837770	10·105895	9·446649	8·851369	8·312558	7·823709	16
17	11·274066	10·477260	9·763223	9·121638	8·543631	8·021553	17
18	11·689587	10·827603	10·059087	9·371887	8·755625	8·201412	18
19	12·085321	11·158116	10·335595	9·603599	8·950115	8·364920	19
20	12·462210	11·469921	10·594014	9·818147	9·128546	8·513564	20
21	12·821153	11·764077	10·835527	10·016803	9·292244	8·648694	21
22	13·163003	12·041582	11·061241	10·200744	9·442425	8·771540	22
23	13·488574	12·303379	11·272187	10·371059	9·580207	8·883218	23
24	13·798642	12·550358	11·469334	10·528758	9·706612	8·984744	24
25	14·093945	12·783356	11·653583	10·674776	9·822580	9·077040	25
26	14·375185	13·003166	11·825779	10·809978	9·928972	9·160945	26
27	14·643034	13·210534	11·986709	10·935165	10·026580	9·237223	27
28	14·898127	13·406164	12·137111	11·051078	10·116128	9·306567	28
29	15·141074	13·590721	12·277674	11·158406	10·198283	9·369606	29
30	15·372451	13·764831	12·409041	11·257783	10·273654	9·426914	30
31	15·592811	13·929086	12·531814	11·349799	10·342802	9·479013	31
32	15·802677	14·084043	12·646555	11·434999	10·406240	9·526376	32
33	16·002549	14·230230	12·753790	11·513888	10·464441	9·569432	33
34	16·192904	14·368141	12·854009	11·586934	10·517835	9·608575	34
35	16·374194	14·498246	12·947672	11·654568	10·566821	9·644159	35
36	16·546852	14·620987	13·035208	11·717193	10·611763	9·676508	36
37	16·711287	14·736780	13·117017	11·775179	10·652993	9·705917	37
38	16·867893	14·846019	13·193473	11·828869	10·690820	9·732651	38
39	17·017041	14·949075	13·264928	11·878582	10·725523	9·756956	39
40	17·159086	15·046297	13·331709	11·924613	10·757360	9·779051	40
41	17·294368	15·138016	13·394120	11·967235	10·786569	9·799137	41
42	17·423208	15·224543	13·452449	12·006699	10·813366	9·817397	42
43	17·545912	15·306173	13·506962	12·043240	10·837951	9·833998	43
44	17·662773	15·383182	13·557908	12·077074	10·860505	9·849089	44
45	17·774070	15·455832	13·605522	12·108402	10·881197	9·862808	45
46	17·880067	15·524370	13·650020	12·137409	10·900181	9·875280	46
47	17·981016	15·589028	13·691608	12·164267	10·917597	9·886618	47
48	18·077158	15·650027	13·730474	12·189136	10·933575	9·896926	48
49	18·168722	15·707572	13·766799	12·212163	10·948234	9·906296	49
50	18·255925	15·761861	13·800746	12·233485	10·961683	9·914814	50
51	18·338977	15·813076	13·832473	12·253227	10·974021	9·922559	51
52	18·418073	15·861393	13·862124	12·271506	10·985340	9·929599	52
53	18·493403	15·906974	13·889836	12·288432	10·995725	9·935999	53
54	18·565146	15·949976	13·915735	12·304103	11·005252	9·941817	54

Present Value of £1 per Annum, payable at the end of every Year, for any Number of Years not exceeding 109; **Rates of Interest 5, 6, 7, 8, 9, and 10 per Cent.**

$V_{x} - 1.$

Years (x)	5 per cent.	6 per cent.	7 per cent.	8 per cent.	9 per cent.	10 per cent.	Years (x)
55	18·633472	15.990543	13·939939	12·318614	11·013993	9·947107	55
56	18·698545	16·028814	13·962560	12·332050	11·022012	9·951915	56
57	18·760519	16·064919	13·983701	12·344491	11·029369	9·956286	57
58	18·819542	16·098980	14·003459	12·356010	11·036118	9·960260	58
59	18·875754	16·131113	14·021924	12·366676	11·042310	9·963873	59
60	18·929290	16·161428	14·039181	12·376552	11·047991	9·967157	60
61	18·980276	16·190026	14·055309	12·385696	11·053203	9·970143	61
62	19·028834	16·217006	14·070383	12·394163	11·057984	9·972857	62
63	19·075080	16·242458	14·084470	12·402003	11·062371	9·975325	63
64	19·119124	16·266470	14·097635	12·409262	11·066395	9·977568	64
65	19·161070	16·289123	14·109940	12·415983	11·070087	9·979607	65
66	19·201019	16·310493	14·121439	12·422207	11·073475	9·981461	66
67	19·239066	16·330654	14·132186	12·427969	11·076582	9·983147	67
68	19·275301	16·349673	14·142230	12·433305	11·079433	9·984679	68
69	19·309810	16·367617	14·151617	12·438245	11·082049	9·986071	69
70	19·342677	16·384544	14·160389	12·442820	11·084449	9·987338	70
71	19·373978	16·400513	14·168588	12·447055	11·086650	9·988489	71
72	19·403788	16·415578	14·176251	12·450977	11·088670	9·989535	72
73	19·432179	16·429791	14·183412	12·454608	11·090523	9·990487	73
74	19·459218	16·443199	14·190104	12·457971	11·092223	9·991351	74
75	19·484970	16·455848	14·196359	12·461084	11·093782	9·992138	75
76	19·509495	16·467781	14·202205	12·463967	11·095213	9·992852	76
77	19·532853	16·479039	14·207668	12·466636	11·096526	9·993502	77
78	19·555098	16·489659	14·212774	12·469107	11·097730	9·994093	78
79	19·576284	16·499679	14·217546	12·471396	11·098835	9·994630	79
80	19·596460	16·509131	14·222005	12·473514	11·099849	9·995118	80
81	19·615677	16·518048	14·226173	12·475476	11·100778	9·995562	81
82	19·633978	16·526460	14·230069	12·477293	11·101632	9·995965	82
83	19·651407	16·534396	14·233709	12·478975	11·102414	9·996332	83
84	19·668007	16·541883	14·237111	12·480532	11·103132	9·996666	84
85	19·683816	16·548947	14·240291	12·481974	11·103791	9·996969	85
86	19·698873	16·555610	14·243262	12·483310	11·104396	9·997244	86
87	19·713212	16·561896	14·246040	12·484546	11·104950	9·997495	87
88	19·726869	16·567827	14·248635	12·485691	11·105459	9·997723	88
89	19·739875	16·573421	14·251061	12·486751	11·105926	9·997930	89
90	19·752262	16·578699	14·253328	12·487732	11·106354	9·998118	90
91	19·764059	16·583679	14·255447	12·488641	11·106746	9·998289	91
92	19·775294	16·588376	14·257427	12·489482	11·107107	9·998444	92
93	19·785994	16·592808	14·259277	12·490261	11·107438	9·998586	93
94	19·796185	16·596988	14·261007	12·490983	11·107741	9·998714	94
95	19·805891	16·600932	14·262623	12·491951	11·108019	9·998831	95
96	19·815134	16·604653	14·264134	12·492269	11·108274	9·998938	96
97	19·823937	16·608163	14·265546	12·492842	11·108509	9·999034	97
98	19·832321	16·611475	14·266865	12·493372	11·108724	9·999122	98
99	19·840306	16·614599	14·268098	12·493863	11·108921	9·999202	99
100	19·847910	16·617546	14·269251	12·494318	11·109102	9·999274	100
101	19·855152	16·620326	14·270328	12·494739	11·109268	9·999340	101
102	19·862049	16·622949	14·271335	12·495129	11·109420	9·999400	102
103	19·868618	16·625424	14·272276	12·495490	11·109560	9·999455	103
104	19·874874	16·627758	14·273155	12·495824	11·109688	9·999505	104
105	19·880832	16·629960	14·273977	12·496133	11·109806	9·999550	105
106	19·886507	16·632038	14·274745	12·496420	11·109914	9·999591	106
107	19·891911	16·633998	14·275463	12·496685	11·110013	9·999628	107
108	19·897058	16·635847	14·276134	12·496931	11·110104	9·999662	108
109	19·901960	16·637591	14·276761	12·497158	11·110187	9·999693	109

NOTE.

The Table "LOGARITHMS of the PRESENT VALUE of £1 payable at the end of every Year" (λv^x), (pages 6–11), was constructed thus :—

Let i = Simple Interest of £1 in a year; Then $\frac{1}{1+i} = v$ for the different rates of Interest in the Tables. The subjoined Logarithms of v were obtained from Callet's Tables to 15 decimal places :

Interest **3** per cent. ; $\lambda v = \lambda \frac{1}{1.03} = 9{\cdot}9871627{,}75294828$; $v = {\cdot}97087379$

Interest **3¼** per cent. ; $\lambda v = \lambda \frac{1}{1.03\frac{1}{4}}$ or $\lambda \frac{4}{4.13} = 9{\cdot}9861099{,}39671561$; $v = {\cdot}96852300$

Interest **3⅓** per cent. ; $\lambda v = \lambda \frac{1}{1.03\frac{1}{3}}$ or $\lambda \frac{3}{3.10} = 9{\cdot}9857595{,}60885390$; $v = {\cdot}96774194$

Interest **3½** per cent. ; $\lambda v = \lambda \frac{1}{1.03\frac{1}{2}}$ or $\lambda \frac{2}{2.07} = 9{\cdot}9850596{,}50207063$; $v = {\cdot}96618357$

Interest **3¾** per cent. ; $\lambda v = \lambda \frac{1}{1.03\frac{3}{4}}$ or $\lambda \frac{4}{4.15} = 9{\cdot}9840118{,}94615870$; $v = {\cdot}96385542$

Interest **4** per cent. ; $\lambda v = \lambda \frac{1}{1.04} = 9{\cdot}9829666{,}60701220$; $v = {\cdot}96153846$

Interest **5** per cent. ; $\lambda v = \lambda \frac{1}{1.05} = 9{\cdot}9788107{,}00930062$; $v = {\cdot}95238095$

Interest **6** per cent. ; $\lambda v = \lambda \frac{1}{1.06} = 9{\cdot}9746941{,}34735230$; $v = {\cdot}94339623$

Interest **7** per cent. ; $\lambda v = \lambda \frac{1}{1.07} = 9{\cdot}9706162{,}22314790$; $v = {\cdot}93457944$

Interest **8** per cent. , $\lambda v = \lambda \frac{1}{1.08} = 9{\cdot}9665762{,}44513050$; $v = {\cdot}92592593$

Interest **9** per cent. ; $\lambda v = \lambda \frac{1}{1.09} = 9{\cdot}9625735{,}02059376$; $v = {\cdot}91743119$

Interest **10** per cent. ; $\lambda v = \lambda \frac{1}{1.10} = 9{\cdot}9586073{,}14841775$; $v = {\cdot}90909091$

The succeeding Values of λv^x were calculated by the Calculating Machine to fifteen places of decimals, but only seven decimals are given in the Tables, as the Machine does not print more than eight figures. The v for the various rates per cent. is given above to eight figures, which have been obtained by common arithmetic. The $1 - v = d = \frac{i}{1+i}$ and the λd are thus given accurately. The Table of the v^x (pages 12 to 15) gives the numbers to the λv^x, and it has been compared with the Table of the Present Value of £1 in Smart's Tables of Interest, Discount, &c. In Smart's Tables of the v^x eight decimals are given, and they were obtained, it is believed, from the formula $\frac{1}{1+i}$ by the common arithmetical process, for all the years at each rate of interest. But for the purposes of this series of Life Tables it has been deemed desirable that the λv^x should be calculated directly from the formula by the Calculating Machine, and thus the v^x is obtained in an independent manner, from the logarithms so calculated, to six decimal places.

Interest **3** per cent. ; $1 - v = d = {\cdot}02912621$; $\lambda d = \bar{2}{\cdot}4642840$

Interest **3¼** per cent. ; $1 - v = d = {\cdot}03147700$; $\lambda d = \bar{2}{\cdot}4979933$

Interest **3⅓** per cent. ; $1 - v = d = {\cdot}03225806$; $\lambda d = \bar{2}{\cdot}5086382$

Interest **3½** per cent. ; $1 - v = d = {\cdot}03381643$; $\lambda d = \bar{2}{\cdot}5291278$

Interest **3¾** per cent. ; $1 - v = d = {\cdot}03614458$; $\lambda d = \bar{2}{\cdot}5580432$

Interest **4** per cent. ; $1 - v = d = {\cdot}03846154$; $\lambda d = \bar{2}{\cdot}5850268$

Interest **5** per cent. ; $1 - v = d = {\cdot}04761905$; $\lambda d = \bar{2}{\cdot}6777808$

Interest **6** per cent. ; $1 - v = d = {\cdot}05660377$; $\lambda d = \bar{2}{\cdot}7528453$

Interest **7** per cent. ; $1 - v = d = {\cdot}06542056$; $\lambda d = \bar{2}{\cdot}8157143$

Interest **8** per cent. ; $1 - v = d = {\cdot}07407407$; $\lambda d = \bar{2}{\cdot}8696662$

Interest **9** per cent. ; $1 - v = d = {\cdot}08256881$; $\lambda d = \bar{2}{\cdot}9168161$

Interest **10** per cent. ; $1 - v = d = {\cdot}09090909$; $\lambda d = \bar{2}{\cdot}9586073$

The Table of the $V_x - 1$ (pages 16–19) is compiled from Smart's Tables as far as the year 100; for the remaining years the $V_x - 1$ is obtained by the addition of the successive Values of v^x.

Modulus of common logarithms = $k = {\cdot}43429448$

$\lambda k = \bar{1}{\cdot}6377843$

$\lambda k^2 = \bar{1}{\cdot}2755686$

LIFE TABLES.

SINGLE LIVES.

YEARLY TABLE.

MALE AND FEMALE.

Without Interest.

YEARLY TABLE:—PERSONS.*

Age	**Dying** in each year of age 0 – 1, 1 – 2, &c.	**Born,** and **living** at each age.	**Sum** of the **numbers born,** and **living** at each age (x), and from age x to the last age in the Table.	**Population,** or the **living** in each year of age 0 – 1, 1 – 2, &c.	(1) **Sum** of the **living** of every age x and upwards to the last Age in the Table; also (2) the **years** which the Persons (l_x) **will live.**	(1) The **years** which the Persons at the age x and upwards **will live;** also, (2) the years which they **have lived** over x.	Age
		$\Sigma\, d_x$	$\Sigma\, l_x$	$l_{x+\frac{1}{2}}$	$\Sigma\, \mathrm{P}_x$	$\Sigma\, \frac{1}{2}(\mathrm{Q}_x + \mathrm{Q}_{x+1}) = \mathrm{Y}_{x+1} + (\mathrm{Q}_{x+1} + \frac{1}{2}\mathrm{P}_x)$	
x	d_x	l_x	L_x	P_x †	Q_x	Y_x	x
0	149,493	1,000,000	41,389,940	902,781	40,858,184	1,309,533,768	0
1	53,680	850,507	40,389,940	818,421	39,955,403	1,269,126,974	1
2	28,238	796,827	39,539,433	781,471	39,136,982	1,229,580,781	2
3	18,456	768,589	38,742,606	758,591	38,355,511	1,190,834,535	3
4	13,315	750,133	37,974,017	742,952	37,596,920	1,152,858,319	4
5	9,899	736,818	37,223,884	731,530	36,853,968	1,115,632,876	5
6	7,768	726,919	36,487,066	722,834	36,122,438	1,079,144,673	6
7	6,559	719,151	35,760,147	715,716	35,399,604	1,043,383,652	7
8	5,458	712,592	35,040,996	709,743	34,683,888	1,008,341,905	8
9	4,625	707,134	34,328,404	704,733	33,974,145	974,012,889	9
10	4,028	702,509	33,621,270	700,433	33,269,412	940,391,111	10
11	3,637	698,481	32,918,761	696,626	32,568,979	907,471,915	11
12	3,431	694,844	32,220,280	693,113	31,872,353	875,251,249	12
13	3,382	691,413	31,525,436	689,725	31,179,240	843,725,452	13
14	3,468	688,031	30,834,023	686,316	30,489,515	812,891,075	14
15	3,669	684,563	30,145,992	682,759	29,803,199	782,744,718	15
16	3,957	680,894	29,461,429	678,956	29,120,440	753,282,899	16
17	4,317	676,937	28,780,535	674,827	28,441,484	724,501,937	17
18	4,720	672,620	28,103,598	670,313	27,766,657	696,397,866	18
19	5,150	667,900	27,430,978	665,379	27,096,344	668,966,366	19
20	5,583	662,750	26,763,078	659,970	26,430,965	642,202,711	20
21	5,668	657,167	26,100,328	654,343	25,770,995	616,101,731	21
22	5,748	651,499	25,443,161	648,634	25,116,652	590,657,907	22
23	5,820	645,751	24,791,662	642,850	24,468,018	565,865,573	23
24	5,886	639,931	24,145,911	636,996	23,825,168	541,718,979	24
25	5,950	634,045	23,505,980	631,077	23,188,172	518,212,309	25
26	6,009	628,095	22,871,935	625,098	22,557,095	495,339,676	26
27	6,065	622,086	22,243,840	619,060	21,931,997	473,095,130	27
28	6,121	616,021	21,621,754	612,967	21,312,937	451,472,663	28
29	6,176	609,900	21,005,733	606,819	20,699,970	430,466,210	29
30	6,231	603,724	20,395,833	600,615	20,093,151	410,069,649	30
31	6,287	597,493	19,792,109	594,357	19,492,536	390,276,805	31
32	6,343	591,206	19,194,616	588,042	18,898,179	371,081,448	32
33	6,404	584,863	18,603,410	581,668	18,310,137	352,477,290	33
34	6,466	578,459	18,018,547	575,234	17,728,469	334,457,987	34
35	6,533	571,993	17,440,088	568,735	17,153,235	317,017,135	35
36	6,601	565,460	16,868,095	562,168	16,584,500	300,148,268	36
37	6,678	558,859	16,302,635	555,529	16,022,332	283,844,852	37
38	6,756	552,181	15,743,776	548,813	15,466,803	268,100,284	38
39	6,841	545,425	15,191,595	542,015	14,917,990	252,907,888	39
40	6,931	538,584	14,646,170	535,130	14,375,975	238,260,905	40
41	7,027	531,653	14,107,586	528,152	13,840,845	224,152,495	41
42	7,127	524,626	13,575,933	521,075	13,312,693	210,575,726	42
43	7,236	517,499	13,051,307	513,895	12,791,618	197,523,571	43
44	7,348	510,263	12,533,808	506,604	12,277,723	184,988,900	44
45	7,467	502,915	12,023,545	499,197	11,771,119	172,964,479	45
46	7,592	495,448	11,520,630	491,668	11,271,922	161,442,959	46
47	7,722	487,856	11,025,182	484,011	10,780,254	150,416,870	47
48	7,857	480,134	10,537,326	476,223	10,296,243	139,878,622	48
49	7,997	472,277	10,057,192	468,297	9,820,020	129,820,490	49
50	8,141	464,280	9,584,915	460,228	9,351,723	120,234,619	50
51	8,414	456,139	9,120,635	451,955	8,891,495	111,113,010	51
52	8,590	447,725	8,664,496	443,452	8,439,540	102,447,492	52
53	8,761	439,135	8,216,771	434,776	7,996,088	94,229,678	53
54	9,259	430,374	7,777,636	425,784	7,561,312	86,450,978	54

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* The Numbers in this Table of **Persons** are the sums of the corresponding numbers in the Tables of **Males** and **Females**, pp. 26 and 30.

† In the English Life Tables No. 1 and No. 2, P_x was put in the form proposed by Mr. Griffith Davies, $= \frac{1}{2}(l_x + l_{x+1}) = l_{x+1} + \frac{1}{2}d_x$; but in this series of Tables it has been calculated directly, and, except in the single case of P_0, represents the numbers living in the middle of each year of age ($= l_{x+\frac{1}{2}}$). P_0 is the arithmetical mean of the series l_0, $l_{\frac{1}{12}}$, $l_{\frac{2}{12}}$ ..... l.

YEARLY TABLE:—PERSONS.

Age	**Dying** in each year of age 0 – 1, 1 – 2, &c.	**Born,** and **living** at each age.	**Sum** of the **numbers born,** and **living** at each age (x), and from age x to the last age in the Table.	**Population,** or the **living** in each year of age 0 – 1, 1 – 2, &c.	(1) **Sum** of the **living** of every age x and upwards to the last age in the Table; also (2) the **years** which the Persons (l_x) **will live.**	(1) The **years** which the Persons at the age x and upwards **will live;** also (2) the years which they **have lived** over x.	Age
		$\Sigma\, d_x$	$\Sigma\, l_x$	$l_{x+\frac{1}{2}}$	$\Sigma\, P_x$	$\Sigma\, \frac{1}{2}(Q_x + Q_{x+1}) = Y_{x+1} + (Q_{x+1} + \frac{1}{2} P_x)$	
x	d_x	l_x	L_x	P_x	Q_x	Y_x	x
55	9,583	421,115	7,347,262	416,364	7,135,528	79,102,559	55
56	9,909	411,532	6,926,147	406,619	6,719,164	72,175,213	56
57	10,245	401,623	6,514,615	396,543	6,312,545	65,659,358	57
58	10,593	391,378	6,112,992	386,125	5,916,002	59,545,084	58
59	10,958	380,785	5,721,614	375,353	5,529,877	53,822,145	59
60	11,338	369,827	5,340,829	364,207	5,154,524	48,479,944	60
61	11,737	358,489	4,971,002	352,671	4,790,317	43,507,524	61
62	12,149	346,752	4,612,513	340,730	4,437,646	38,893,543	62
63	12,572	334,603	4,265,761	328,371	4,096,916	34,626,261	63
64	13,002	322,031	3,931,158	315,583	3,768,545	30,693,531	64
65	13,430	309,029	3,609,127	302,368	3,452,962	27,082,777	65
66	13,846	295,599	3,300,098	288,727	3,150,594	23,781,000	66
67	14,244	281,753	3,004,499	274,679	2,861,867	20,774,769	67
68	14,607	267,509	2,722,746	260,249	2,587,188	18,050,242	68
69	14,925	252,902	2,455,237	245,476	2,326,939	15,593,178	69
70	15,184	237,977	2,202,335	230,414	2,081,463	13,388,977	70
71	15,369	222,793	1,964,358	215,127	1,851,049	11,422,721	71
72	15,468	207,424	1,741,565	199,697	1,635,922	9,679,235	72
73	15,469	191,956	1,534,141	184,215	1,436,225	8,143,162	73
74	15,363	176,487	1,342,185	168,785	1,252,010	6,799,045	74
75	15,136	161,124	1,165,698	153,520	1,083,225	5,631,427	75
76	14,789	145,988	1,004,574	138,542	929,705	4,624,962	76
77	14,319	131,199	858,586	123,973	791,163	3,764,528	77
78	13,726	116,880	727,387	109,936	667,190	3,035,351	78
79	13,021	103,154	610,507	96,548	557,254	2,423,130	79
80	12,214	90,133	507,353	83,919	460,706	1,914,150	80
81	11,320	77,919	417,220	72,143	376,787	1,495,403	81
82	10,358	66,599	339,301	61,297	304,644	1,154,688	82
83	9,352	56,241	272,702	51,437	243,347	880,692	83
84	8,324	46,889	216,461	42,597	191,910	663,063	84
85	7,300	38,565	169,572	34,788	149,313	492,452	85
86	6,298	31,265	131,007	27,994	114,525	360,533	86
87	5,346	24,967	99,742	22,179	86,531	260,005	87
88	4,459	19,621	74,775	17,284	64,352	184,563	88
89	3,653	15,162	55,154	13,240	47,068	128,853	89
90	2,933	11,509	39,992	9,959	33,828	88,406	90
91	2,310	8,576	28,483	7,349	23,869	59,557	91
92	1,781	6,266	19,907	5,315	16,520	39,363	92
93	1,343	4,485	13,641	3,764	11,205	25,500	93
94	989	3,142	9,156	2,609	7,441	16,177	94
95	713	2,153	6,014	1,766	4,832	10,041	95
96	500	1,440	3,861	1,167	3,066	6,092	96
97	342	940	2,421	752	1,899	3,609	97
98	228	598	1,481	472	1,147	2,086	98
99	147	370	883	288	675	1,175	99
100	92	223	513	171	387	644	100
101	57	131	290	99	216	342	101
102	33	74	159	56	117	176	102
103	19	41	85	30	61	87	103
104	10	22	44	16	31	41	104
105	6	12	22	8	15	18	105
106	3	6	10	4	7	7	106
107	2	3	4	2	3	2	107
108	1	1	1	1	1	...	108
109	...	...	...	...	...	...	109

Age	**Numbers attaining** each Year of age (x) to **1,000,000 born.**			**Population** maintained at each Year of Age (x) by **1,000,000 Annual Births.**			**Deaths** out of the same Population in each Year of Age (x).			Age
	l_x			P_x			d_x			
x	**Persons.**	**Males.**	**Females.**	**Persons.**	**Males.**	**Females.**	**Persons.**	**Males.**	**Females.**	x
0	1,000,000	511,745	488,255	902,781	456,820	445,961	149,493	83,719	65,774	0
1	850,507	428,026	422,481	818,421	411,999	406,422	53,680	27,521	26,159	1
2	796,827	400,505	396,322	781,471	392,294	389,177	28,238	14,215	14,023	2
3	768,589	386,290	382,299	758,591	381,312	377,279	18,456	9,213	9,243	3
4	750,133	377,077	373,056	742,952	373,461	369,491	13,315	6,719	6,596	4
5	736,818	370,358	366,460	731,530	367,672	363,858	9,899	5,033	4,866	5
6	726,919	365,325	361,594	722,834	363,244	359,590	7,768	3,953	3,815	6
7	719,151	361,372	357,779	715,716	359,635	356,081	6,559	3,310	3,249	7
8	712,592	358,062	354,530	709,743	356,632	353,111	5,458	2,734	2,724	8
9	707,134	355,328	351,806	704,733	354,133	350,600	4,625	2,297	2,328	9
10	702,509	353,031	349,478	700,433	352,007	348,426	4,028	1,983	2,045	10
11	698,481	351,048	347,433	696,626	350,141	346,485	3,637	1,776	1,861	11
12	694,844	349,272	345,572	693,113	348,431	344,682	3,431	1,666	1,765	12
13	691,413	347,606	343,807	689,725	346,789	342,936	3,382	1,637	1,745	13
14	688,031	345,969	342,062	686,316	345,139	341,177	3,468	1,679	1,789	14
15	684,563	344,290	340,273	682,759	343,415	339,344	3,669	1,781	1,888	15
16	680,894	342,509	338,385	678,956	341,566	337,390	3,957	1,928	2,029	16
17	676,937	340,581	336,356	674,827	339,550	335,277	4,317	2,112	2,205	17
18	672,620	338,469	334,151	670,313	337,336	332,977	4,720	2,320	2,400	18
19	667,900	336,149	331,751	665,379	334,906	330,473	5,150	2,541	2,609	19
20	662,750	333,608	329,142	659,970	332,231	327,739	5,583	2,764	2,819	20
21	657,167	330,844	326,323	654,343	329,448	324,895	5,668	2,801	2,867	21
22	651,499	328,043	323,456	648,634	326,629	322,005	5,748	2,836	2,912	22
23	645,751	325,207	320,544	642,850	323,777	319,073	5,820	2,868	2,952	23
24	639,931	322,339	317,592	636,996	320,894	316,102	5,886	2,897	2,989	24
25	634,045	319,442	314,603	631,077	317,982	313,095	5,950	2,926	3,024	25
26	628,095	316,516	311,579	625,098	315,042	310,056	6,009	2,954	3,055	26
27	622,086	313,562	308,524	619,060	312,075	306,985	6,065	2,981	3,084	27
28	616,021	310,581	305,440	612,967	309,080	303,887	6,121	3,009	3,112	28
29	609,900	307,572	302,328	606,819	306,057	300,762	6,176	3,038	3,138	29
30	603,724	304,534	299,190	600,615	303,004	297,611	6,231	3,068	3,163	30
31	597,493	301,466	296,027	594,357	299,920	294,437	6,287	3,100	3,187	31
32	591,206	298,366	292,840	588,042	296,804	291,238	6,343	3,134	3,209	32
33	584,863	295,232	289,631	581,668	293,651	288,017	6,404	3,171	3,233	33
34	578,459	292,061	286,398	575,234	290,461	284,773	6,466	3,211	3,255	34
35	571,993	288,850	283,143	568,735	287,229	281,506	6,533	3,254	3,279	35
36	565,460	285,596	279,864	562,168	283,952	278,216	6,601	3,300	3,301	36
37	558,859	282,296	276,563	555,529	280,626	274,903	6,678	3,352	3,326	37
38	552,181	278,944	273,237	548,813	277,248	271,565	6,756	3,406	3,350	38
39	545,425	275,538	269,887	542,015	273,813	268,202	6,841	3,465	3,376	39
40	538,584	272,073	266,511	535,130	270,317	264,813	6,931	3,529	3,402	40
41	531,653	268,544	263,109	528,152	266,755	261,397	7,027	3,596	3,431	41
42	524,626	264,948	259,678	521,075	263,123	257,952	7,127	3,668	3,459	42
43	517,499	261,280	256,219	513,805	259,417	254,478	7,236	3,746	3,490	43
44	510,263	257,534	252,729	506,604	255,632	250,972	7,348	3,826	3,522	44
45	502,915	253,708	249,207	499,197	251,763	247,434	7,467	3,912	3,555	45
46	495,448	249,796	245,652	491,668	247,807	243,861	7,592	4,001	3,591	46
47	487,856	245,795	242,061	484,011	243,759	240,252	7,722	4,095	3,627	47
48	480,134	241,700	238,434	476,223	239,617	236,606	7,857	4,192	3,665	48
49	472,277	237,508	234,769	468,297	235,375	232,922	7,997	4,292	3,705	49
50	464,280	233,216	231,064	460,228	231,032	229,196	8,141	4,395	3,746	50
51	456,139	228,821	227,318	451,955	226,525	225,430	8,414	4,626	3,788	51
52	447,725	224,195	223,530	443,452	221,832	221,620	8,590	4,758	3,832	52
53	439,135	219,437	219,698	434,776	217,010	217,766	8,761	4,885	3,876	53
54	430,374	214,552	215,822	425,784	212,061	213,723	9,259	5,013	4,246	54

Age	**Numbers attaining** each Year of Age (x) to **1,000,000 born.**			**Population** maintained at each Year of Age (x) by **1,000,000 Annual Births.**			**Deaths** out of the same Population in each Year of Age (x).			Age
	l_x			P_x			d_x			
x	**Persons.**	**Males.**	**Females.**	**Persons.**	**Males.**	**Females.**	**Persons.**	**Males.**	**Females.**	x
55	421,115	209,539	211,576	416,364	206,984	209,380	9,583	5,144	4,439	55
56	411,532	204,395	207,137	406,619	201,772	204,847	9,909	5,281	4,628	56
57	401,623	199,114	202,509	396,543	196,419	200,124	10,245	5,428	4,817	57
58	391,378	193,686	197,692	386,125	190,914	195,211	10,593	5,584	5,009	58
59	380,785	188,102	192,683	375,353	185,248	190,105	10,958	5,752	5,206	59
60	369,827	182,350	187,477	364,207	179,409	184,798	11,338	5,929	5,409	60
61	358,489	176,421	182,068	352,671	173,386	179,285	11,737	6,118	5,619	61
62	346,752	170,303	176,449	340,730	167,171	173,559	12,149	6,314	5,835	62
63	334,603	163,989	170,614	328,371	160,757	167,614	12,572	6,515	6,057	63
64	322,031	157,474	164,557	315,583	154,139	161,444	13,002	6,720	6,282	64
65	309,029	150,754	158,275	302,368	147,319	155,049	13,430	6,921	6,509	65
66	295,599	143,833	151,766	288,727	140,299	148,428	13,846	7,115	6,731	66
67	281,753	136,718	145,035	274,679	133,091	141,588	14,244	7,297	6,947	67
68	267,509	129,421	138,088	260,249	125,711	134,538	14,607	7,458	7,149	68
69	252,902	121,963	130,939	245,476	118,181	127,295	14,925	7,593	7,332	69
70	237,977	114,370	123,607	230,414	110,533	119,881	15,184	7,695	7,489	70
71	222,793	106,675	116,118	215,127	102,802	112,325	15,369	7,756	7,613	71
72	207,424	98,919	108,505	199,697	95,033	104,664	15,468	7,770	7,698	72
73	191,956	91,149	100,807	184,215	87,274	96,941	15,469	7,733	7,736	73
74	176,487	83,416	93,071	168,785	79,581	89,204	15,363	7,639	7,724	74
75	161,124	75,777	85,347	153,520	72,012	81,508	15,136	7,483	7,653	75
76	145,988	68,294	77,694	138,542	64,629	73,913	14,789	7,268	7,521	76
77	131,199	61,026	70,173	123,973	57,493	66,480	14,319	6,990	7,329	77
78	116,880	54,036	62,844	109,936	50,663	59,273	13,726	6,655	7,071	78
79	103,154	47,381	55,773	96,548	44,196	52,352	13,021	6,266	6,755	79
80	90,133	41,115	49,018	83,919	38,142	45,777	12,214	5,832	6,382	80
81	77,919	35,283	42,636	72,143	32,542	39,601	11,320	5,361	5,959	81
82	66,599	29,922	36,677	61,297	27,428	33,869	10,358	4,862	5,496	82
83	56,241	25,060	31,181	51,437	22,821	28,616	9,352	4,349	5,003	83
84	46,889	20,711	26,178	42,597	18,729	23,868	8,324	3,834	4,490	84
85	38,565	16,877	21,688	34,788	15,151	19,637	7,300	3,328	3,972	85
86	31,265	13,549	17,716	27,994	12,070	15,924	6,298	2,840	3,458	86
87	24,967	10,709	14,258	22,179	9,462	12,717	5,346	2,384	2,962	87
88	19,621	8,325	11,296	17,284	7,292	9,992	4,459	1,965	2,494	88
89	15,162	6,360	8,802	13,240	5,521	7,719	3,653	1,590	2,063	89
90	11,509	4,770	6,739	9,959	4,102	5,857	2,933	1,260	1,673	90
91	8,576	3,510	5,066	7,349	2,988	4,361	2,310	979	1,331	91
92	6,266	2,531	3,735	5,315	2,132	3,183	1,781	744	1,037	92
93	4,485	1,787	2,698	3,764	1,489	2,275	1,343	553	790	93
94	3,142	1,234	1,908	2,609	1,017	1,592	989	401	588	94
95	2,153	833	1,320	1,766	678	1,088	713	285	428	95
96	1,440	548	892	1,167	441	726	500	196	304	96
97	940	352	588	752	279	473	342	132	210	97
98	598	220	378	472	172	300	228	86	142	98
99	370	134	236	288	103	185	147	55	92	99
100	223	79	144	171	60	111	92	33	59	100
101	131	46	85	99	34	65	57	21	36	101
102	74	25	49	56	19	37	33	11	22	102
103	41	14	27	30	10	20	19	7	12	103
104	22	7	15	16	5	11	10	3	7	104
105	12	4	8	8	3	5	6	2	4	105
106	6	2	4	4	1	3	3	1	2	106
107	3	1	2	2	1	1	2	1	1	107
108	1	...	1	1	...	1	1	...	1	108

YEARLY TABLE:—MALES.

Age	**Dying** in each year of age 0 – 1, 1 – 2, &c.	**Born,** and **living** at each age.	**Sum** of the **numbers born,** and **living** at each age (x) and from x to the last age in the Table.	**Population,** or the **living** in each year of age 0 – 1, 1 – 2, &c.	(1) **Sum** of the **living** of every age x and upwards to the last age in the Table; also (2) the **years** which the Males (l_x) **will live.**	(1) The **years** which the Males at the age (x) and upwards **will live**; also (2) the years which they **have lived** over x.	Age
		Σd_x	Σl_x	$l_{x+\frac{1}{2}}$	ΣP_x	$\Sigma\frac{1}{2}(Q_x+Q_{x+1}) = Y_{x+1}+(Q_{x+1}+\frac{1}{2}P_x)$	
x	d_x	l_x	L_x	P_x*	Q_x	Y_x	x
0	83,719	511,745	20,699,829	456,820	20,426,138	648,962,343	0
1	27,521	428,026	20,188,084	411,999	19,969,318	628,764,615	1
2	14,215	400,505	19,760,058	392,294	19,557,319	609,001,296	2
3	9,213	386,290	19,359,553	381,312	19,165,025	589,640,124	3
4	6,719	377,077	18,973,263	373,461	18,783,713	570,665,755	4
5	5,033	370,358	18,596,186	367,672	18,410,252	552,068,773	5
6	3,953	365,325	18,225,828	363,244	18,042,580	533,842,357	6
7	3,310	361,372	17,860,503	359,635	17,679,336	515,981,399	7
8	2,734	358,062	17,499,131	356,632	17,319,701	498,481,880	8
9	2,297	355,328	17,141,069	354,133	16,963,069	481,340,495	9
10	1,983	353,031	16,785,741	352,007	16,608,936	464,554,493	10
11	1,776	351,048	16,432,710	350,141	16,256,929	448,121,560	11
12	1,666	349,272	16,081,662	348,431	15,906,788	432,039,702	12
13	1,637	347,606	15,732,390	346,789	15,558,357	416,307,129	13
14	1,679	345,969	15,384,784	345,139	15,211,568	400,922,167	14
15	1,781	344,290	15,038,815	343,415	14,866,429	385,883,168	15
16	1,928	342,509	14,694,525	341,566	14,523,014	371,188,447	16
17	2,112	340,581	14,352,016	339,550	14,181,448	356,836,216	17
18	2,320	338,469	14,011,435	337,336	13,841,898	342,824,543	18
19	2,541	336,149	13,672,966	334,906	13,504,562	329,151,313	19
20	2,764	333,608	13,336,817	332,231	13,169,656	315,814,204	20
21	2,801	330,844	13,003,209	329,448	12,837,425	302,810,663	21
22	2,836	328,043	12,672,365	326,629	12,507,977	290,137,962	22
23	2,868	325,207	12,344,322	323,777	12,181,348	277,793,300	23
24	2,897	322,339	12,019,115	320,894	11,857,571	265,773,840	24
25	2,926	319,442	11,696,776	317,982	11,536,677	254,076,716	25
26	2,954	316,516	11,377,334	315,042	11,218,695	242,699,030	26
27	2,981	313,562	11,060,818	312,075	10,903,653	231,637,856	27
28	3,009	310,581	10,747,256	309,080	10,591,578	220,890,241	28
29	3,038	307,572	10,436,675	306,057	10,282,498	210,453,203	29
30	3,068	304,534	10,129,103	303,004	9,976,441	200,323,733	30
31	3,100	301,466	9,824,569	299,920	9,673,437	190,498,794	31
32	3,134	298,366	9,523,103	296,804	9,373,517	180,975,317	32
33	3,171	295,232	9,224,737	293,651	9,076,713	171,750,202	33
34	3,211	292,061	8,929,505	290,461	8,783,062	162,820,315	34
35	3,254	288,850	8,637,444	287,229	8,492,601	154,182,483	35
36	3,300	285,596	8,348,594	283,952	8,205,372	145,833,497	36
37	3,352	282,296	8,062,998	280,626	7,921,420	137,770,101	37
38	3,406	278,944	7,780,702	277,248	7,640,794	129,988,994	38
39	3,465	275,538	7,501,758	273,813	7,363,546	122,486,824	39
40	3,529	272,073	7,226,220	270,317	7,089,733	115,260,184	40
41	3,596	268,544	6,954,147	266,755	6,819,416	108,305,610	41
42	3,668	264,948	6,685,603	263,123	6,552,661	101,619,571	42
43	3,746	261,280	6,420,655	259,417	6,289,538	95,198,472	43
44	3,826	257,534	6,159,375	255,632	6,030,121	89,038,642	44
45	3,912	253,708	5,901,841	251,763	5,774,489	83,136,337	45
46	4,001	249,796	5,648,133	247,807	5,522,726	77,487,730	46
47	4,095	245,795	5,398,337	243,759	5,274,919	72,088,907	47
48	4,192	241,700	5,152,542	239,617	5,031,160	66,935,868	48
49	4,292	237,508	4,910,842	235,375	4,791,543	62,024,516	49
50	4,395	233,216	4,673,334	231,032	4,556,168	57,350,661	50
51	4,626	228,821	4,440,118	226,525	4,325,136	52,910,009	51
52	4,758	224,195	4,211,297	221,832	4,098,611	48,698,135	52
53	4,885	219,437	3,987,102	217,010	3,876,779	44,710,440	53
54	5,013	214,552	3,767,665	212,061	3,659,769	40,942,166	54

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* In the English Life Tables No. 1 and No. 2, P_x was put in the form proposed by Mr. Griffith Davies, $=\frac{1}{2}(l_x+l_{x+1})=l_{x+1}+\frac{1}{2}d_x$; but in this series of Tables it has been calculated directly, and, except in the single case of P_0, represents the numbers living in the middle of each year of age ($=l_{x+\frac{1}{2}}$). P_0 is the arithmetical mean of the series l_0, $l_{\frac{1}{12}}$, $l_{\frac{2}{12}}$ ..... l_1. $\lambda\, P_x = \lambda\, l_{4x+2}$ in Quarterly Table, page 130.

YEARLY TABLE:—MALES.

Age	**Dying** in each year of age 0 – 1, 1 – 2, &c.	**Born,** and **living** at each age.	**Sum** of the **numbers born,** and **living** at each age (x) and from x to the last age in the Table.	**Population,** or the **living** in each year of age 0 – 1, 1 – 2, &c.	(1) **Sum** of the **living** of every age x and upwards to the last age in the Table; also (2) the **years** which the Males (l_x) **will live.**	(1) The **years** which the Males at the age (x) and upwards **will live**; also (2) the years which they **have lived** over (x).	**Age**
		Σd_x	Σl_x	$l_{x+\frac{1}{2}}$	ΣP_x	$\Sigma \frac{1}{2}(Q_x + Q_{x+1}) = Y_{x+1} + (Q_{x+1} + \frac{1}{2}P_x)$	
x	d_x	l_x	L_x	P_x	Q_x	Y_x	x
55	5,144	209,539	3,553,113	206,984	3,447,708	37,388,428	55
56	5,281	204,395	3,343,574	201,772	3,240,724	34,044,212	56
57	5,428	199,114	3,139,179	196,419	3,038,952	30,904,374	57
58	5,584	193,686	2,940,065	190,914	2,842,533	27,963,631	58
59	5,752	188,102	2,746,379	185,248	2,651,619	25,216,555	59
60	5,929	182,350	2,558,277	179,409	2,466,371	22,657,560	60
61	6,118	176,421	2,375,927	173,386	2,286,962	20,280,894	61
62	6,314	170,303	2,199,506	167,171	2,113,576	18,080,625	62
63	6,515	163,989	2,029,203	160,757	1,946,405	16,050,634	63
64	6,720	157,474	1,865,214	154,139	1,785,648	14,184,608	64
65	6,921	150,754	1,707,740	147,319	1,631,509	12,476,029	65
66	7,115	143,833	1,556,986	140,299	1,484,190	10,918,180	66
67	7,297	136,718	1,413,153	133,091	1,343,891	9,504,139	67
68	7,458	129,421	1,276,435	125,711	1,210,800	8,226,794	68
69	7,593	121,963	1,147,014	118,181	1,085,089	7,078,849	69
70	7,695	114,370	1,025,051	110,533	966,908	6,052,851	70
71	7,756	106,675	910,681	102,802	856,375	5,141,209	71
72	7,770	98,919	804,006	95,033	753,573	4,336,235	72
73	7,733	91,149	705,087	87,274	658,540	3,630,179	73
74	7,639	83,416	613,938	79,581	571,266	3,015,276	74
75	7,483	75,777	530,522	72,012	491,685	2,483,800	75
76	7,268	68,294	454,745	64,629	419,673	2,028,121	76
77	6,990	61,026	386,451	57,493	355,044	1,640,763	77
78	6,655	54,036	325,425	50,663	297,551	1,314,465	78
79	6,266	47,381	271,389	44,196	246,888	1,042,246	79
80	5,832	41,115	224,008	38,142	202,692	817,456	80
81	5,361	35,283	182,893	32,542	164,550	633,835	81
82	4,862	29,922	147,610	27,428	132,008	485,556	82
83	4,349	25,060	117,688	22,821	104,580	367,262	83
84	3,834	20,711	92,628	18,729	81,759	274,092	84
85	3,328	16,877	71,917	15,151	63,030	201,698	85
86	2,840	13,549	55,040	12,070	47,879	146,243	86
87	2,384	10,709	41,491	9,462	35,809	104,399	87
88	1,965	8,325	30,782	7,292	26,347	73,321	88
89	1,590	6,360	22,457	5,521	19,055	50,620	89
90	1,260	4,770	16,097	4,102	13,534	34,326	90
91	979	3,510	11,327	2,988	9,432	22,843	91
92	744	2,531	7,817	2,132	6,444	14,905	92
93	553	1,787	5,286	1,489	4,312	9,527	93
94	401	1,234	3,499	1,017	2,823	5,959	94
95	285	833	2,265	678	1,806	3,645	95
96	196	548	1,432	441	1,128	2,178	96
97	132	352	884	279	687	1,270	97
98	86	220	532	172	408	723	98
99	55	134	312	103	236	401	99
100	33	79	178	60	133	216	100
101	21	46	99	34	73	113	101
102	11	25	53	19	39	57	102
103	7	14	28	10	20	28	103
104	3	7	14	5	10	13	104
105	2	4	7	3	5	5	105
106	1	2	3	1	2	2	106
107	1	1	1	1	1	...	107
108	...	...	...	...	...	...	108
109	...	...	...	...	...	...	109

YEARLY TABLE:—MALES.

l_x, Q_x, Y_x, and their Logarithms.

Age (x)	l_x	Q_x	Y_x	$\lambda\ l_x$	$\lambda\ Q_x$	$\lambda\ Y_x$	Age (x)
0	511,745	20,426,138	648,962,343	5·7090538	7·3101863	8·8122194	0
1	428,026	19,969,318	628,764,615	5·6314702	7·3003632	8·7984881	1
2	400,505	19,557,319	609,001,296	5·6026079	7·2913093	8·7846182	2
3	386,290	19,165,025	589,640,124	5·5869132	7·2825095	8·7705870	3
4	377,077	18,783,713	570,665,755	5·5764301	7·2737814	8·7563818	4
5	370,358	18,410,252	552,068,773	5·5686214	7·2650597	8·7419931	5
6	365,325	18,042,580	533,842,357	5·5626788	7·2562986	8·7274130	6
7	361,372	17,679,336	515,981,399	5·5579539	7·2474661	8·7126340	7
8	358,062	17,319,701	498,481,880	5·5539583	7·2385404	8·6976494	8
9	355,328	16,963,069	481,340,495	5·5506295	7·2295045	8·6824525	9
10	353,031	16,608,936	464,554,493	5·5478129	7·2203420	8·6670367	10
11	351,048	16,256,929	448,121,560	5·5453670	7·2110385	8·6513959	11
12	349,272	15,906,788	432,039,702	5·5431636	7·2015826	8·6355237	12
13	347,606	15,558,357	416,307,129	5·5410877	7·1919639	8·6194138	13
14	345,969	15,211,568	400,922,167	5·5390375	7·1821741	8·6030601	14
15	344,290	14,866,429	385,883,168	5·5369242	7·1722067	8·5864559	15
16	342,509	14,523,014	371,188,447	5·5346726	7·1620566	8·5695945	16
17	340,581	14,181,448	356,836,216	5·5322204	7·1517206	8·5524689	17
18	338,469	13,841,898	342,824,543	5·5295186	7·1411957	8·5350718	18
19	336,149	13,504,562	329,151,313	5·5265313	7·1304804	8·5173956	19
20	333,608	13,169,656	315,814,204	5·5232361	7·1195746	8·4994317	20
21	330,844	12,837,425	302,810,663	5·5196235	7·1084781	8·4811712	21
22	328,043	12,507,977	290,137,962	5·5159306	7·0971873	8·4626046	22
23	325,207	12,181,348	277,793,300	5·5121599	7·0856954	8·4437218	23
24	322,339	11,857,571	265,773,840	5·5083133	7·0739958	8·4245122	24
25	319,442	11,536,677	254,076,716	5·5043918	7·0620808	8·4049649	25
26	316,516	11,218,695	242,699,030	5·5003955	7·0499425	8·3850680	26
27	313,562	10,903,653	231,637,856	5·4963237	7·0375719	8·3648097	27
28	310,581	10,591,578	220,890,241	5·4921749	7·0249609	8·3441765	28
29	307,572	10,282,498	210,453,203	5·4879467	7·0120988	8·3231555	29
30	304,534	9,976,441	200,323,733	5·4836359	6·9989756	8·3017323	30
31	301,466	9,673,437	190,498,794	5·4792385	6·9855808	8·2798922	31
32	298,366	9,373,517	180,975,317	5·4747496	6·9719026	8·2576193	32
33	295,232	9,076,713	171,750,202	5·4701635	6·9579286	8·2348972	33
34	292,061	8,783,062	162,820,315	5·4654737	6·9436459	8·2117086	34
35	288,850	8,492,601	154,182,483	5·4606728	6·9290408	8·1880350	35
36	285,596	8,205,372	145,833,497	5·4557526	6·9140983	8·1638573	36
37	282,296	7,921,420	137,770,101	5·4507040	6·8988030	8·1391550	37
38	278,944	7,640,794	129,988,994	5·4455172	6·8831384	8·1139066	38
39	275,538	7,363,546	122,486,824	5·4401815	6·8670871	8·0880893	39
40	272,073	7,089,733	115,260,184	5·4346853	6·8506299	8·0616794	40
41	268,544	6,819,416	108,305,610	5·4290162	6·8337472	8·0346510	41
42	264,948	6,552,661	101,619,571	5·4231610	6·8164178	8·0069775	42
43	261,280	6,289,538	95,198,472	5·4171056	6·7986188	7·9786299	43
44	257,534	6,030,121	89,038,642	5·4108353	6·7803260	7·9495785	44
45	253,708	5,774,489	83,136,337	5·4043342	6·7615136	7.9197909	45
46	249,796	5,522,726	77,487,730	5·3975858	6·7421536	7·8892330	46
47	245,795	5,274,919	72,088,907	5·3905728	6·7222158	7·8578685	47
48	241,700	5,031,160	66,935,868	5·3832768	6·7016681	7·8256590	48
49	237,508	4,791,543	62,024,516	5·3756788	6·6804754	7·7925634	49
50	233,216	4,556,168	57,350,661	5·3677590	6·6585998	7·7585385	50
51	228,821	4,325,136	52,910,009	5·3594966	6·6359998	7·7235379	51
52	224,195	4,098,611	48,698,135	5·3506256	6·6126367	7·6875124	52
53	219,437	3,876,779	44,710,440	5·3413096	6·5884710	7·6504090	53
54	214,552	3,659,769	40,942,166	5·3315317	6·5634537	7·6121709	54

YEARLY TABLE:—MALES.

l_x, Q_x, Y_x, and their Logarithms.

Age (x)	l_x	Q_x	Y_x	$\lambda\, l_x$	$\lambda\, Q_x$	$\lambda\, Y_x$	Age (x)
55	209,539	3,447,708	37,388,428	5·3212644	6·5375305	7·5727372	55
56	204,395	3,240,724	34,044,212	5·3104701	6·5106420	7·5320432	56
57	199,114	3,038,952	30,904,374	5·2991007	6·4827239	7·4900199	57
58	193,686	2,842,533	27,963,631	5·2870978	6·4537056	7·4465936	58
59	188,102	2,651,619	25,216,555	5·2743928	6·4235111	7·4016858	59
60	182,350	2,466,371	22,657,560	5·2609067	6·3920584	7·3552132	60
61	176,421	2,286,962	20,280,894	5·2465500	6·3592590	7·3070870	61
62	170,303	2,113,576	18,080,625	5·2312231	6·3250179	7·2572135	62
63	163,989	1,946,405	16,050,634	5·2148160	6·2892332	7·2054921	63
64	157,474	1,785,648	14,184,608	5·1972084	6·2517958	7·1518174	64
65	150,754	1,631,509	12,476,029	5·1782696	6·2125895	7·0960765	65
66	143,833	1,484,190	10,918,180	5·1578586	6·1714895	7·0381503	66
67	136,718	1,343,891	9,504,139	5·1358242	6·1283641	6·9779128	67
68	129,421	1,210,800	8,226,794	5·1120046	6·0830724	6·9152306	68
69	121,963	1,085,089	7,078,849	5·0862280	6·0354654	6·8499627	69
70	114,370	966,908	6,052,851	5·0583120	5·9853852	6·7819600	70
71	106,675	856,375	5,141,209	5·0280640	5·9326640	6·7110653	71
72	98,919	753,573	4,336,235	4·9952810	5·8771253	6·6371128	72
73	91,149	658,540	3,630,179	4·9597499	5·8185822	6·5599281	73
74	83,416	571,266	3,015,276	4·9212469	5·7568384	6·4793271	74
75	75,777	491,685	2,483,800	4·8795382	5·6916870	6·3951166	75
76	68,294	419,673	2,028,121	4·8343795	5·6229110	6·3070939	76
77	61,026	355,044	1,640,763	4·7855162	5·5502822	6·2150458	77
78	54,036	297,551	1,314,465	4·7326834	5·4735615	6·1187491	78
79	47,381	246,888	1,042,246	4·6756059	5·3925000	6·0179703	79
80	41,115	202,692	817,456	4·6139981	5·3068366	5·9124644	80
81	35,283	164,550	633,835	4·5475641	5·2162979	5·8019762	81
82	29,922	132,008	485,556	4·4759977	5·1206002	5·6862393	82
83	25,060	104,580	367,262	4·3989823	5·0194486	5·5649760	83
84	20,711	81,759	274,092	4·3161911	4·9125356	5·4378964	84
85	16,877	63,030	201,698	4·2272869	4·7995473	5·3047016	85
86	13,549	47,879	146,243	4·1319221	4·6801451	5·1650751	86
87	10,709	35,809	104,399	4·0297390	4·5539922	5·0186964	87
88	8,325	26,347	73,321	3·9203692	4·4207312	4·8652284	88
89	6,360	19,055	50,620	3·8034343	4·2800090	4·7043221	89
90	4,770	13,534	34,326	3·6785456	4·1314262	4·5356232	90
91	3,510	9,432	22,843	3·5453037	3·9746038	4·3587531	91
92	2,531	6,444	14,905	3·4032992	3·8091555	4·1733320	92
93	1,787	4,312	9,527	3·2521123	3·6346788	3·9789562	93
94	1,234	2,823	5,959	3·0913128	3·4507109	3·7751734	94
95	833	1,806	3,645	2·9204603	3·2567177	3·5616975	95
96	548	1,128	2,178	2·7391040	3·0523091	3·3380579	96
97	352	687	1,270	2·5467827	2·8369567	3·1038037	97
98	220	408	723	2·3430251	2·6106602	2·8591383	98
99	134	236	401	2·1273492	2·3729120	2·6031444	99
100	79	133	216	1·8992630	2·1238516	2·3344538	100
101	46	73	113	1·6582641	1·8633229	2·0530784	101
102	25	39	57	1·4038397	1·5910646	1·7558749	102
103	14	20	28	1·1354667	1·3010300	1·4471580	103
104	7	10	13	0·8526118	1·0000000	1·1139434	104
105	4	5	5	0·5547310	0·6989700	0·6989700	105
106	2	2	2	0·2412705	0·3010300	0·3010300	106
107	1	1	...	$\bar{1}$·9116657	0·0000000	...	107
108	...	...	...	$\bar{1}$·5653419	...	...	108
109	...	...	...	$\bar{1}$·2017142	...	...	109

YEARLY TABLE:—FEMALES.

Age	**Dying** in each year of age 0–1, 1–2, &c.	**Born**, and **living** at each age.	**Sum** of the **numbers born**, and **living** at each age (x) and from age x to the last age in the Table.	**Population**, or the **living** in each year of age 0–1, 1–2, &c.	(1) **Sum** of the **living** of every age x and upwards to the last age in the Table; also (2) the **years** which the Females (l_x) **will live**.	(1) The **years** which the Females at the age (x) and upwards **will live**; also (2) the years which they **have lived** over (x).	Age
		Σd_x	Σl_x	$l_{x+\frac{1}{2}}$	ΣP_x	$\Sigma\frac{1}{2}(Q_x+Q_{x+1}) = Y_{x+1}+(Q_{x+1}+\frac{1}{2}P_x)$	
x	d_x	l_x	L_x	P_x*	Q_x	Y_x	x
0	65,774	488,255	20,690,111	445,961	20,432,046	660,571,425	0
1	26,159	422,481	20,201,856	406,422	19,986,085	640,362,359	1
2	14,023	396,322	19,779,375	389,177	19,579,663	620,579,485	2
3	9,243	382,299	19,383,053	377,279	19,190,486	601,194,411	3
4	6,596	373,056	19,000,754	369,491	18,813,207	582,192,564	4
5	4,866	366,460	18,627,698	363,858	18,443,716	563,564,103	5
6	3,815	361,594	18,261,238	359,590	18,079,858	545,302,316	6
7	3,249	357,779	17,899,644	356,081	17,720,268	527,402,253	7
8	2,724	354,530	17,541,865	353,111	17,364,187	509,860,025	8
9	2,328	351,806	17,187,335	350,600	17,011,076	492,672,394	9
10	2,045	349,478	16,835,529	348,426	16,660,476	475,836,618	10
11	1,861	347,433	16,486,051	346,485	16,312,050	459,350,355	11
12	1,765	345,572	16,138,618	344,682	15,965,565	443,211,547	12
13	1,745	343,807	15,793,046	342,936	15,620,883	427,418,323	13
14	1,789	342,062	15,449,239	341,177	15,277,947	411,968,908	14
15	1,888	340,273	15,107,177	339,344	14,936,770	396,861,550	15
16	2,029	338,385	14,766,904	337,390	14,597,426	382,094,452	16
17	2,205	336,356	14,428,519	335,277	14,260,036	367,665,721	17
18	2,400	334,151	14,092,163	332,977	13,924,759	353,573,323	18
19	2,609	331,751	13,758,012	330,473	13,591,782	339,815,053	19
20	2,819	329,142	13,426,261	327,739	13,261,309	326,388,507	20
21	2,867	326,323	13,097,119	324,895	12,933,570	313,291,068	21
22	2,912	323,456	12,770,796	322,005	12,608,675	300,519,945	22
23	2,952	320,544	12,447,340	319,073	12,286,670	288,072,273	23
24	2,989	317,592	12,126,796	316,102	11,967,597	275,945,139	24
25	3,024	314,603	11,809,204	313,095	11,651,495	264,135,593	25
26	3,055	311,579	11,494,601	310,056	11,338,400	252,640,646	26
27	3,084	308,524	11,183,022	306,985	11,028,344	241,457,274	27
28	3,112	305,440	10,874,498	303,887	10,721,359	230,582,422	28
29	3,138	302,328	10,569,058	300,762	10,417,472	220,013,007	29
30	3,163	299,190	10,266,730	297,611	10,116,710	209,745,916	30
31	3,187	296,027	9,967,540	294,437	9,819,099	199,778,011	31
32	3,209	292,840	9,671,513	291,238	9,524,662	190,106,131	32
33	3,233	289,631	9,378,673	288,017	9,233,424	180,727,088	33
34	3,255	286,398	9,089,042	284,773	8,945,407	171,637,672	34
35	3,279	283,143	8,802,644	281,506	8,660,634	162,834,652	35
36	3,301	279,864	8,519,501	278,216	8,379,128	154,314,771	36
37	3,326	276,563	8,239,637	274,903	8,100,912	146,074,751	37
38	3,350	273,237	7,963,074	271,565	7,826,009	138,111,290	38
39	3,376	269,887	7,689,837	268,202	7,554,444	130,421,064	39
40	3,402	266,511	7,419,950	264,813	7,286,242	123,000,721	40
41	3,431	263,109	7,153,439	261,397	7,021,429	115,846,885	41
42	3,459	259,678	6,890,330	257,952	6,760,032	108,956,155	42
43	3,490	256,219	6,630,652	254,478	6,502,080	102,325,099	43
44	3,522	252,729	6,374,433	250,972	6,247,602	95,950,258	44
45	3,555	249,207	6,121,704	247,434	5,996,630	89,828,142	45
46	3,591	245,652	5,872,497	243,861	5,749,196	83,955,229	46
47	3,627	242,061	5,626,845	240,252	5,505,335	78,327,963	47
48	3,665	238,434	5,384,784	236,606	5,265,083	72,942,754	48
49	3,705	234,769	5,146,350	232,922	5,028,477	67,795,974	49
50	3,746	231,064	4,911,581	229,196	4,795,555	62,883,958	50
51	3,788	227,318	4,680,517	225,430	4,566,359	58,203,001	51
52	3,832	223,530	4,453,199	221,620	4,340,929	53,749,357	52
53	3,876	219,698	4,229,669	217,766	4,119,309	49,519,238	53
54	4,246	215,822	4,009,971	213,723	3,901,543	45,508,812	54

* In the English Life Tables No. 1 and No. 2, P_x was put in the form proposed by Mr. Griffith Davies, $=\frac{1}{2}(l_x+l_{x+1})=l_{x+1}+\frac{1}{2}d_x$; but in this series of Tables it has been calculated directly, and, except in the single case of P_0, represents the numbers living in the middle of each year of age ($=l_{x+\frac{1}{2}}$). P_0 is the arithmetical mean of the series l_0 $l_{\frac{1}{4}}$, $l_{\frac{1}{2}}$ ..... l_1. $\lambda P_x = \lambda l_{4x+2}$ in Quarterly Table, page 132.

YEARLY TABLE:—Females.

Age	**Dying** in each year of age 0 − 1, 1 − 2, &c.	**Born,** and **living** at each age.	**Sum** of the **numbers born,** and **living** at each age (x) and from age x to the last age in the Table.	**Population,** or the **living** in each year of age 0 − 1, 1 − 2, &c.	(1) **Sum** of the **living** of every age x and upwards to the last age in the Table; also (2) the **years** which the Females (l_x) **will live.**	(1) The **years** which the Females at the age (x) and upwards **will live**; also (2) the years which they **have lived** over (x).	**Age**
		Σd_x	Σl_x	$l_{x+\frac{1}{2}}$	ΣP_x	$\Sigma\frac{1}{2}(Q_x+Q_{x+1})= Y_{x+1}+(Q_{x+1}+\frac{1}{2}P_x)$	
x	d_x	l_x	L_x	P_x	Q_x	Y_x	x
55	4,439	211,576	3,794,149	209,380	3,687,820	41,714,131	55
56	4,628	207,137	3,582,573	204,847	3,478,440	38,131,001	56
57	4,817	202,509	3,375,436	200,124	3,273,593	34,754,984	57
58	5,009	197,692	3,172,927	195,211	3,073,469	31,581,453	58
59	5,206	192,683	2,975,235	190,105	2,878,258	28,605,590	59
60	5,409	187,477	2,782,552	184,798	2,688,153	25,822,384	60
61	5,619	182,068	2,595,075	179,285	2,503,355	23,226,630	61
62	5,835	176,449	2,413,007	173,559	2,324,070	20,812,918	62
63	6,057	170,614	2,236,558	167,614	2,150,511	18,575,627	63
64	6,282	164,557	2,065,944	161,444	1,982,897	16,508,923	64
65	6,509	158,275	1,901,387	155,049	1,821,453	14,606,748	65
66	6,731	151,766	1,743,112	148,428	1,666,404	12,862,820	66
67	6,947	145,035	1,591,346	141,588	1,517,976	11,270,630	67
68	7,149	138,088	1,446,311	134,538	1,376,388	9,823,448	68
69	7,332	130,939	1,308,223	127,295	1,241,850	8,514,329	69
70	7,489	123,607	1,177,284	119,881	1,114,555	7,336,126	70
71	7,613	116,118	1,053,677	112,325	994,674	6,281,512	71
72	7,698	108,505	937,559	104,664	882,349	5,343,000	72
73	7,736	100,807	829,054	96,941	777,685	4,512,983	73
74	7,724	93,071	728,247	89,204	680,744	3,783,769	74
75	7,653	85,347	635,176	81,508	591,540	3,147,627	75
76	7,521	77,694	549,829	73,913	510,032	2,596,841	76
77	7,329	70,173	472,135	66,480	436,119	2,123,765	77
78	7,071	62,844	401,962	59,273	369,639	1,720,886	78
79	6,755	55,773	339,118	52,352	310,366	1,380,884	79
80	6,382	49,018	283,345	45,777	258,014	1,096,694	80
81	5,959	42,636	234,327	39,601	212,237	861,568	81
82	5,496	36,677	191,691	33,869	172,636	669,132	82
83	5,003	31,181	155,014	28,616	138,767	513,430	83
84	4,490	26,178	123,833	23,868	110,151	388,971	84
85	3,972	21,688	97,655	19,637	86,283	290,754	85
86	3,458	17,716	75,967	15,924	66,646	214,290	86
87	2,962	14,258	58,251	12,717	50,722	155,606	87
88	2,494	11,296	43,993	9,992	38,005	111,242	88
89	2,063	8,802	32,697	7,719	28,013	78,233	89
90	1,673	6,739	23,895	5,857	20,294	54,080	90
91	1,331	5,066	17,156	4,361	14,437	36,714	91
92	1,037	3,735	12,090	3,183	10,076	24,458	92
93	790	2,698	8,355	2,275	6,893	15,973	93
94	588	1,908	5,657	1,592	4,618	10,218	94
95	428	1,320	3,749	1,088	3,026	6,396	95
96	304	892	2,429	726	1,938	3,914	96
97	210	588	1,537	473	1,212	2,339	97
98	142	378	949	300	739	1,363	98
99	92	236	571	185	439	774	99
100	59	144	335	111	254	428	100
101	36	85	191	65	143	229	101
102	22	49	106	37	78	119	102
103	12	27	57	20	41	59	103
104	7	15	30	11	21	28	104
105	4	8	15	5	10	13	105
106	2	4	7	3	5	5	106
107	1	2	3	1	2	2	107
108	1	1	1	1	1	...	108
109	...	...	...	...	...	...	109

YEARLY TABLE :—FEMALES.

l_x, Q_x, Y_x, and their Logarithms.

Age (x)	l_x	Q_x	Y_x	$\lambda\, l_x$	$\lambda\, Q_x$	$\lambda\, Y_x$	Age (x)
0	488,255	20,432,046	660,571,425	5·6886465	7·3103120	8·8199198	0
1	422,481	19,986,085	640,362,359	5·6258069	7·3007279	8·8064259	1
2	396,322	19,579,663	620,579,485	5·5980479	7·2918051	8·7927975	2
3	382,299	19,190,486	601,194,411	5·5824033	7·2830860	8·7790149	3
4	373,056	18,813,207	582,192,564	5·5717743	7·2744629	9·7650667	4
5	366,460	18,443,716	563,564,103	5·5640266	7·2658486	8·7509434	5
6	361,594	18,079,858	545,302,316	5·5582216	7·2571950	8·7366373	6
7	357,779	17,720,268	527,402,253	5·5536144	7·2484703	8·7221421	7
8	354,530	17,364,187	509,860,025	5·5496536	7·2396546	8·7074509	8
9	351,806	17,011,076	492,672,394	5·5463032	7·2307319	8·6925583	9
10	349,478	16,660,476	475,836,618	5·5434193	7·2216875	8·6774579	10
11	347,433	16,312,050	459,350,355	5·5408707	7·2125205	8·6621441	11
12	345,572	15,965,565	443,211,547	5·5385381	7·2031844	8·6466111	12
13	343,807	15,620,883	427,418,323	5·5363145	7·1937054	8·6308531	13
14	342,062	15,277,947	411,968,908	5·5341051	7·1840651	8·6148645	14
15	340,273	14,936,770	396,861,550	5·5318275	7·1742567	8·5986391	15
16	338,385	14,597,426	382,094,452	5·5294114	7·1642764	8·5821708	16
17	336,356	14,260,036	367,665,721	5·5267986	7·1541207	8·5654531	17
18	334,151	13,924,759	353,573,323	5·5239434	7·1437877	8·5484795	18
19	331,751	13,591,782	339,815,053	5·5208121	7·1332764	8·5312427	19
20	329,142	13,261,309	326,388,507	5·5173833	7·1225864	8·5137348	20
21	326,323	12,933,570	313,291,068	5·5136479	7·1117185	8·4959480	21
22	323,456	12,608,675	300,519,945	5·5098150	7·1006696	8·4778733	22
23	320,544	12,286,670	288,072,273	5·5058879	7·0894343	8·4595015	23
24	317,592	11,967,597	275,945,139	5·5018696	7·0780071	8·4408228	24
25	314,603	11,651,495	264,135,593	5·4977625	7·0663819	8·4218270	25
26	311,579	11,338,400	252,640,646	5·4935685	7·0545518	8·4025031	26
27	308,524	11,028,344	241,457,274	5·4892891	7·0425102	8·3828403	27
28	305,440	10,721,359	230,582,422	5·4849253	7·0302499	8·3628262	28
29	302,328	10,417,472	220,013,007	5·4804778	7·0177623	8·3424483	29
30	299,190	10,116,710	209,745,916	5·4759466	7·0050392	8·3216936	30
31	296,027	9,819,099	199,778,011	5·4713313	6·9920717	8·3005477	31
32	292,840	9,524,662	190,106,131	5·4666311	6·9788496	8·2789960	32
33	289,631	9,233,424	180,727,088	5·4618446	6·9653628	8·2570232	33
34	286,398	8,945,407	171,637,672	5·4569701	6·9516001	8·2346127	34
35	283,143	8,660,634	162,834,652	5·4520053	6·9375497	8·2117470	35
36	279,864	8,379,128	154,314,771	5·4469475	6·9231988	8·1884076	36
37	276,563	8,100,912	146,074,751	5·4417935	6·9085339	8·1645753	37
38	273,237	7,826,009	138,111,290	5·4365396	6·8935403	8·1402293	38
39	269,887	7,554,444	130,421,064	5·4311817	6·8782025	8·1153478	39
40	266,511	7,286,242	123,000,721	5·4257153	6·8625036	8·0899076	40
41	263,109	7,021,429	115,846,885	5·4201352	6·8464255	8·0638844	41
42	259,678	6,760,032	108,956,155	5·4144359	6·8299487	8·0372519	42
43	256,219	6,502,080	102,325,099	5·4086114	6·8130523	8·0099822	43
44	252,729	6,247,602	95,950,258	5·4026553	6·7957133	7·9820462	44
45	249,207	5,996,630	89,828,142	5·3965606	6·7779073	7·9534124	45
46	245,652	5,749,196	83,955,229	5·3903199	6·7596072	7·9240478	46
47	242,061	5,505,335	78,327,963	5·3839253	6·7407838	7·8939168	47
48	238,434	5,265,083	72,942,754	5·3773685	6·7214053	7·8629821	48
49	234,769	5,028,477	67,795,974	5·3706407	6·7014365	7·8312040	49
50	231,064	4,795,555	62,883,958	5·3637325	6·6808390	7·7985399	50
51	227,318	4,566,359	58,203,001	5·3566343	6·6595701	7·7649454	51
52	223,530	4,340,929	53,749,357	5·3493358	6·6375827	7·7303733	52
53	219,698	4,119,309	49,519,238	5·3418264	6·6148244	7·6947740	53
54	215,822	3,901,543	45,508,812	5·3340949	6·5912363	7·6580955	54

YEARLY TABLE :—FEMALES.

l_x, Q_x, Y_x, and their Logarithms.

Age (x)	l_x	Q_x	Y_x	$\lambda\ l_x$	$\lambda\ Q_x$	$\lambda\ Y_x$	Age (x)
55	211,576	3,687,820	41,714,131	5·3254664	6·5667697	7·6202831	55
56	207,137	3,478,440	38,131,001	5·3162583	6·5413845	7·5812782	56
57	202,509	3,273,593	34,754,984	5·3064447	6·5150247	7·5410171	57
58	197,692	3,073,469	31,581,453	5·2959887	6·4876289	7·4994321	58
59	192,683	2,878,258	28,605,590	5·2848423	6·4591298	7·4564510	59
60	187,477	2,688,153	25,822,384	5·2729470	6·4294540	7·4119962	60
61	182,068	2,503,355	23,226,630	5·2602329	6·3985225	7·3659862	61
62	176,449	2,324,070	20,812,918	5·2466194	6·3662492	7·3183330	62
63	170,614	2,150,511	18,575,627	5·2320149	6·3325416	7·2689435	63
64	164,557	1,982,897	16,508,923	5·2163168	6·2973001	7·2177187	64
65	158,275	1,821,453	14,606,748	5·1994118	6·2604180	7·1645536	65
66	151,766	1,666,404	12,862,820	5·1811753	6·2217803	7·1093362	66
67	145,035	1,517,976	11,270,630	5·1614720	6·1812649	7·0519482	67
68	138,088	1,376,388	9,823,448	5·1401557	6·1387409	6·9922640	68
69	130,939	1,241,850	8,514,329	5·1170691	6·0940692	6·9301504	69
70	123,607	1,114,555	7,336,126	5·0920440	6·0471016	6·8654668	70
71	116,118	994,674	6,281,512	5·0649013	5·9976808	6·7980642	71
72	108,505	882,349	5,343,000	5·0354509	5·9456404	6·7277852	72
73	100,807	777,685	4,512,983	5·0034919	5·8908037	6·6544637	73
74	93,071	680,744	3,783,769	4·9688124	5·8329839	6·5779246	74
75	85,347	591,540	3,147,627	4·9311894	5·7719841	6·4979833	75
76	77,694	510,032	2,596,841	4·8905892	5·7075974	6·4144454	76
77	70,173	436,119	2,123,765	4·8461669	5·6396050	6·3271064	77
78	62,844	369,639	1,720,886	4·7982670	5·5677778	6·2357521	78
79	55,773	310,366	1,380,884	4·7464227	5·4918741	6·1401572	79
80	49,018	258,014	1,096,694	4·6903565	5·4116433	6·0400855	80
81	42,636	212,237	861,568	4·6297799	5·3268211	5·9352896	81
82	36,677	172,636	669,132	4·5643934	5·2371314	5·8255118	82
83	31,181	138,767	513,430	4·4938867	5·1422862	5·7104812	83
84	26,178	110,151	388,971	4·4179384	5·0419885	5·5899172	84
85	21,688	86,283	290,754	4·3362162	4·9359252	5·4635257	85
86	17,716	66,646	214,290	4·2483769	4·8237741	5·3310019	86
87	14,258	50,722	155,606	4·1540665	4·7051964	5·1920263	87
88	11,296	38,005	111,242	4·0529197	4·5798407	5·0462688	88
89	8,802	28,013	78,233	3·9445605	4·4473596	4·8933900	89
90	6,739	20,294	54,080	3·8286020	4·3073677	4·7330367	90
91	5,066	14,437	36,714	3·7046463	4·1594770	4·5648317	91
92	3,735	10,076	24,458	3·5722846	4·0032882	4·3884209	92
93	2,698	6,893	15,973	3·4310969	3·8384083	4·2033865	93
94	1,908	4,618	10,218	3·2806526	3·6644539	4·0093659	94
95	1,320	3,026	6,396	3·1205101	3·4808689	3·8059085	95
96	892	1,938	3,914	2·9502167	3·2873538	3·5926208	96
97	588	1,212	2,339	2·7693088	3·0835026	3·3690302	97
98	378	739	1,363	2·5773121	2·8686444	3·1344959	98
99	236	439	774	2·3737409	2·6424645	2·8887410	99
100	144	254	428	2·1580991	2·4048337	2·6314438	100
101	85	143	229	1·9298792	2·1553360	2·3598355	101
102	49	78	119	1·6885630	1·8920946	2·0755470	102
103	27	41	59	1·4336213	1·6127839	1·7708520	103
104	15	21	28	1·1645140	1·3222193	1·4471580	104
105	8	10	13	0·8806901	1·0000000	1·1139434	105
106	4	5	5	0·5815875	0·6989700	0·6989700	106
107	2	2	2	0·2666332	0·3010300	0·3010300	107
108	1	1	...	$\bar{1}$·9352434	0·0000000	...	108
109	...	...	...	$\bar{1}$·5868253	...	...	109

YEARLY TABLE :—MALES and FEMALES.

MORTALITY of MALES and FEMALES in ENGLAND.

Age (x)	Annual Mortality per Cent. at the Age (x).		Males and Females living at the Age (x) to One Death annually.		The living of the Age (x) and upwards to One Death annually.		Age (x)
	Males.	**Females.**	**Males.**	**Females.**	**Males.**	**Females.**	
0	18·326	14·749	5	7	39·91	41·85	0
1	6·680	6·436	15	16	46·65	47·31	1
2	3·624	3·603	28	28	48·83	49·40	2
3	2·416	2·450	41	41	49·61	50·20	3
4	1·799	1·785	56	56	49·81	50·43	4
5	1·369	1·337	73	75	49·71	50·33	5
6	1·088	1·061	92	94	49·39	50·00	6
7	·920	·912	109	110	48·92	49·53	7
8	·767	·771	130	130	48·37	48·98	8
9	·649	·664	154	151	47·74	48·35	9
10	·563	·587	178	170	47·05	47·67	10
11	·507	·537	197	186	46·31	46·95	11
12	·478	·512	209	195	45·54	46·20	12
13	·472	·509	212	196	44·76	45·44	13
14	·486	·524	206	191	43·97	44·66	14
15	·519	·556	193	180	43·18	43·90	15
16	·564	·601	177	166	42·40	43·14	16
17	·622	·658	161	152	41·64	42·40	17
18	·688	·721	145	139	40·90	41·67	18
19	·759	·789	132	127	40·17	40·97	19
20	·832	·860	120	116	39·48	40·29	20
21	·850	·882	118	113	38·80	39·63	21
22	·868	·904	115	111	38·13	38·98	22
23	·886	·925	113	108	37·46	38·33	23
24	·903	·946	111	106	36·79	37·68	24
25	·920	·966	109	104	36·12	37·04	25
26	·938	·985	107	102	35·44	36·39	26
27	·955	1·005	105	100	34·77	35·75	27
28	·974	1·024	103	98	34·10	35·10	28
29	·993	1·043	101	96	33·43	34·46	29
30	1·013	1·063	99	94	32·76	33·81	30
31	1·034	1·082	97	92	32·09	33·17	31
32	1·056	1·102	95	91	31·42	32·53	32
33	1·080	1·123	93	89	30·74	31·88	33
34	1·105	1·143	90	87	30·07	31·23	34
35	1·133	1·165	88	86	29·40	30·59	35
36	1·162	1·186	86	84	28·73	29·94	36
37	1·194	1·210	84	83	28·06	29·29	37
38	1·229	1·234	81	81	27·39	28·64	38
39	1·265	1·259	79	79	26·72	27·99	39
40	1·306	1·285	77	78	26·06	27·34	40
41	1·348	1·313	74	76	25·39	26·69	41
42	1·394	1·341	72	75	24·73	26·03	42
43	1·444	1·371	69	73	24·07	25·38	43
44	1·497	1·403	67	71	23·41	24·72	44
45	1·554	1·437	64	70	22·76	24·06	45
46	1·615	1·473	62	68	22·11	23·40	46
47	1·680	1·510	60	66	21·46	22·74	47
48	1·749	1·549	57	65	20·82	22·08	48
49	1·823	1·591	55	63	20·17	21·42	49

The Table may be read thus :—To 100,000 men living of the age of 20 and under 21 there are 832 deaths annually ; to 100,000 females living 860 deaths annually ; or 1 in 120 men and 1 in 116 women of that age die annually. And of men of the age of 20 and upwards 1 in 39·48 dies annually; of women of the age of 20 and

YEARLY TABLE:—Males and Females.

Mortality of Males and Females in England.

Age (*x*)	Annual Mortality per Cent. at the Age (*x*).		Males and Females living at the Age (*x*) to One Death annually.		The living of the Age (*x*) and upwards to One Death annually.		Age (*x*)
	Males.	**Females.**	**Males.**	**Females.**	**Males.**	**Females.**	
50	1·902	1·634	53	61	19·54	20·75	50
51	2·042	1·680	49	60	18·90	20·09	51
52	2·145	1·729	47	58	18·28	19·42	52
53	2·251	1·780	44	56	17·67	18·75	53
54	2·364	1·987	42	50	17·06	18·08	54
55	2·485	2·120	40	47	16·45	17·43	55
56	2·617	2·259	38	44	15·86	16·79	56
57	2·763	2·407	36	42	15·26	16·17	57
58	2·925	2·566	34	39	14·68	15·55	58
59	3·105	2·738	32	37	14·10	14·94	59
60	3·305	2·927	30	34	13·53	14·34	60
61	3·529	3·134	28	32	12·96	13·75	61
62	3·777	3·362	26	30	12·41	13·17	62
63	4·053	3·614	25	28	11·87	12·60	63
64	4·360	3·891	23	26	11·34	12·05	64
65	4·698	4·198	21	24	10·82	11·51	65
66	5·071	4·535	20	22	10·32	10·98	66
67	5·483	4·906	18	20	9·83	10·47	67
68	5·933	5·314	17	19	9·36	9·97	68
69	6·425	5·760	16	17	8·90	9·48	69
70	6·962	6·247	14	16	8·45	9·02	70
71	7·545	6·778	13	15	8·03	8·57	71
72	8·176	7·355	12	14	7·62	8·13	72
73	8·861	7·980	11	13	7·22	7·71	73
74	9·599	8·659	10	12	6·85	7·31	74
75	10·391	9·389	10	11	6·49	6·93	75
76	11·246	10·175	9	10	6·15	6·56	76
77	12·158	11·024	8	9	5·82	6·21	77
78	13·136	11·930	8	8	5·51	5·88	78
79	14·178	12·903	7	8	5·21	5·56	79
80	15·290	13·942	7	7	4·93	5·26	80
81	16·474	15·048	6	7	4·66	4·98	81
82	17·726	16·227	6	6	4·41	4·71	82
83	19·057	17·483	5	6	4·17	4·45	83
84	20·471	18·812	5	5	3·95	4·21	84
85	21·966	20·227	5	5	3·73	3·98	85
86	23·529	21·716	4	5	3·53	3·76	86
87	25·196	23·292	4	4	3·34	3·56	87
88	26·947	24·960	4	4	3·16	3·36	88
89	28·799	26·726	3	4	3·00	3·18	89
90	30·717	28·564	3	4	2·84	3·01	90
91	32·764	30·521	3	3	2·69	2·85	91
92	34·897	32·579	3	3	2·55	2·70	92
93	37·139	34·725	3	3	2·41	2·55	93
94	39·430	36·935	3	3	2·29	2·42	94
95	42·035	39·338	2	3	2·17	2·29	95
96	44·444	41·873	2	2	2·06	2·17	96
97	47·312	44·397	2	2	1·95	2·06	97
98	50·000	47·333	2	2	1·85	1·96	98
99	53·398	49·730	2	2	1·76	1·86	99
100	55·000	53·153	2	2	1·68	1·76	100

pwards 1 in 40·29 dies annually. The mean afterlifetimes at these ages are 39·48 and 40·29. The mean afterlifetimes at other ages are shown by the corresponding figures.

YEARLY TABLE :—MALES.

The **Mean Afterlifetime** (or the Expectation of Life) of **Males** of the Age x, and of **Males** of the Age x and upwards; also the **Mean Ages of the Living** and the **Mean Age at Death.**

Age (or past Life-time).	**Mean Afterlifetime** of **Males** of the Age x.	**Mean Afterlifetime** of **Males** of the Age x and upwards.	**Mean Age** of **Males living** of the Age x and upwards.	**Mean Age at Death** Of **Males actually living** at the Age x.	**Mean Age at Death** Of **Males actually living** at the Age x and upwards.	**Age** (or past Life-time).
x	$E_x = \frac{Q_x}{l_x}$	$E'_x = \frac{Y_x}{Q_x}$	$x + E'_x$	$x + E_x$	$x + 2E'_x$	x
	Years.	Years.	Years.	Years.	Years.	
0	39·91	31·77	31·77	39·91	63·54	0
1	46·65	31·49	32·49	47·65	63·98	1
2	48·83	31·14	33·14	50·83	64·28	2
3	49·61	30·77	33·77	52·61	64·54	3
4	49·81	30·38	34·38	53·81	64·76	4
5	49·71	29·99	34·99	54·71	64·98	5
6	49·39	29·59	35·59	55·39	65·18	6
7	48·92	29·19	36·19	55·92	65·38	7
8	48·37	28·78	36·78	56·37	65·56	8
9	47·74	28·38	37·38	56·74	65·76	9
10	47·05	27·97	37·97	57·05	65·94	10
11	46·31	27·56	38·56	57·31	66·12	11
12	45·54	27·16	39·16	57·54	66·32	12
13	44·76	26·76	39·76	57·76	66·52	13
14	43·97	26·36	40·36	57·97	66·72	14
15	43·18	25·96	40·96	58·18	66·92	15
16	42·40	25·56	41·56	58·40	67·12	16
17	41·64	25·16	42·16	58·64	67·32	17
18	40·90	24·77	42·77	58·90	67·54	18
19	40·17	24·37	43·37	59·17	67·74	19
20	39·48	23·98	43·98	59·48	67·96	20
21	38·80	23·59	44·59	59·80	68·18	21
22	38·13	23·20	45·20	60·13	68·40	22
23	37·46	22·80	45·80	60·46	68·60	23
24	36·79	22·41	46·41	60·79	68·82	24
25	36·12	22·02	47·02	61·12	69·04	25
26	35·44	21·63	47·63	61·44	69·26	26
27	34·77	21·24	48·24	61·77	69·48	27
28	34·10	20·86	48·86	62·10	69·72	28
29	33·43	20·47	49·47	62·43	69·94	29
30	32·76	20·08	50·08	62·76	70·16	30
31	32·09	19·69	50·69	63·09	70·38	31
32	31·42	19·31	51·31	63·42	70·62	32
33	30·74	18·92	51·92	63·74	70·84	33
34	30·07	18·54	52·54	64·07	71·08	34
35	29·40	18·15	53·15	64·40	71·30	35
36	28·73	17·77	53·77	64·73	71·54	36
37	28·06	17·39	54·39	65·06	71·78	37
38	27·39	17·01	55·01	65·39	72·02	38
39	26·72	16·63	55·63	65·72	72·26	39
40	26·06	16·26	56·26	66·06	72·52	40
41	25·39	15·88	56·88	66·39	72·76	41
42	24·73	15·51	57·51	66·73	73·02	42
43	24·07	15·14	58·14	67·07	73·28	43
44	23·41	14·77	58·77	67·41	73·54	44
45	22·76	14·40	59·40	67·76	73·80	45
46	22·11	14·03	60·03	68·11	74·06	46
47	21·46	13·67	60·67	68·46	74·34	47
48	20·82	13·30	61·30	68·82	74·60	48
49	20·17	12·94	61·94	69·17	74·88	49

YEARLY TABLE :—MALES.

The **Mean Afterlifetime** (or the Expectation of Life) of **Males** of the Age *x*, and of **Males** of the Age *x* and upwards; also the **Mean Ages of the Living** and the **Mean Age at Death.**

Age (or past Life-time).	**Mean Afterlifetime** of **Males** of the Age *x*.	**Mean Afterlifetime** of **Males** of the Age *x* and upwards.	**Mean Age** of **Males living** of the Age *x* and upwards.	**Mean Age at Death**		**Age** (or past Life-time).
				Of **Males actually living** at the Age *x*.	Of **Males actually living** at the Age *x* and upwards.	
x	$E_x = \frac{Q_x}{l_x}$	$E'_x = \frac{Y_x}{Q_x}$	$x + E'_x$	$x + E_x$	$x + 2E'_x$	x
	Years.	Years.	Years.	Years.	Years.	
50	19·54	12·59	62·59	69·54	75·18	50
51	18·90	12·23	63·23	69·90	75·46	51
52	18·28	11·88	63·88	70·28	75·76	52
53	17·67	11·53	64·53	70·67	76·06	53
54	17·06	11·19	65·19	71·06	76·38	54
55	16·45	10·84	65·84	71·45	76·68	55
56	15·86	10·51	66·51	71·86	77·02	56
57	15·26	10·17	67·17	72·26	77·34	57
58	14·68	9·84	67·84	72·68	77·68	58
59	14·10	9·51	68·51	73·10	78·02	59
60	13·53	9·19	69·19	73·53	78·38	60
61	12·96	8·87	69·87	73·96	78·74	61
62	12·41	8·55	70·55	74·41	79·10	62
63	11·87	8·25	71·25	74·87	79·50	63
64	11·34	7·94	71·94	75·34	79·88	64
65	10·82	7·65	72·65	75·82	80·30	65
66	10·32	7·36	73·36	76·32	80·72	66
67	9·83	7·07	74·07	76·83	81·14	67
68	9·36	6·79	74·79	77·36	81·58	68
69	8·90	6·52	75·52	77·90	82·04	69
70	8·45	6·26	76·26	78·45	82·52	70
71	8·03	6·00	77·00	79·03	83·00	71
72	7·62	5·75	77·75	79·62	83·50	72
73	7·22	5·51	78·51	80·22	84·02	73
74	6·85	5·28	79·28	80·85	84·56	74
75	6·49	5·05	80·05	81·49	85·10	75
76	6·15	4·83	80·83	82·15	85·66	76
77	5·82	4·62	81·62	82·82	86·24	77
78	5·51	4·42	82·42	83·51	86·84	78
79	5·21	4·22	83·22	84·21	87·44	79
80	4·93	4·03	84·03	84·93	88·06	80
81	4·66	3·85	84·85	85·66	88·70	81
82	4·41	3·68	85·68	86·41	89·36	82
83	4·17	3·51	86·51	87·17	90·02	83
84	3·95	3·35	87·35	87·95	90·70	84
85	3·73	3·20	88·20	88·73	91·40	85
86	3·53	3·05	89·05	89·53	92·10	86
87	3·34	2·92	89·92	90·34	92·84	87
88	3·16	2·78	90·78	91·16	93·56	88
89	3·00	2·66	91·66	92·00	94·32	89
90	2·84	2·54	92·54	92·84	95·08	90
91	2·69	2·42	93·42	93·69	95·84	91
92	2·55	2·31	94·31	94·55	96·62	92
93	2·41	2·21	95·21	95·41	97·42	93
94	2·29	2·11	96·11	96·29	98·22	94
95	2·17	2·02	97·02	97·17	99·04	95
96	2·06	1·93	97·93	98·06	99·86	96
97	1·95	1·85	98·85	98·95	100·70	97
98	1·85	1·77	99·77	99·85	101·54	98
99	1·76	1·70	100·70	100·76	102·40	99
100	1·68	1·62	101·62	101·68	103·24	100

YEARLY TABLE:—FEMALES.

The **Mean Afterlifetime** (or the Expectation of Life) of **Females** of the Age *x*, and of **Females** of the Age *x* and upwards; also the **Mean Ages of the Living** and the **Mean Age at Death.**

Age (or past Life-time).	Mean Afterlifetime of Females of the Age *x*.	Mean Afterlifetime of Females of the Age *x* and upwards.	Mean Age of Females living of the Age *x* and upwards.	Mean Age at Death: Of Females actually living at the Age *x*.	Mean Age at Death: Of Females actually living at the Age *x* and upwards.	Age (or past Life-time).
x	$E_x = \frac{Q_x}{l_x}$	$E'_x = \frac{Y_x}{Q_x}$	$x + E'_x$	$x + E_x$	$x + 2E'_x$	x
	Years.	Years.	Years.	Years.	Years.	
0	41·85	32·33	32·33	41·85	64·66	0
1	47·31	32·04	33·04	48·31	65·08	1
2	49·40	31·70	33·70	51·40	65·40	2
3	50·20	31·33	34·33	53·20	65·66	3
4	50·43	30·95	34·95	54·43	65·90	4
5	50·33	30·56	35·56	55·33	66·12	5
6	50·00	30·16	36·16	56·00	66·32	6
7	49·53	29·76	36·76	56·53	66·52	7
8	48·98	29·36	37·36	56·98	66·72	8
9	48·35	28·96	37·96	57·35	66·92	9
10	47·67	28·56	38·56	57·67	67·12	10
11	46·95	28·16	39·16	57·95	67·32	11
12	46·20	27·76	39·76	58·20	67·52	12
13	45·44	27·36	40·36	58·44	67·72	13
14	44·66	26·96	40·96	58·66	67·92	14
15	43·90	26·57	41·57	58·90	68·14	15
16	43·14	26·18	42·18	59·14	68·36	16
17	42·40	25·78	42·78	59·40	68·56	17
18	41·67	25·39	43·39	59·67	68·78	18
19	40·97	25·00	44·00	59·97	69·00	19
20	40·29	24·61	44·61	60·29	69·22	20
21	39·63	24·22	45·22	60·63	69·44	21
22	38·98	23·83	45·83	60·98	69·66	22
23	38·33	23·45	46·45	61·33	69·90	23
24	37·68	23·06	47·06	61·68	70·12	24
25	37·04	22·67	47·67	62·04	70·34	25
26	36·39	22·28	48·28	62·39	70·56	26
27	35·75	21·89	48·89	62·75	70·78	27
28	35·10	21·51	49·51	63·10	71·02	28
29	34·46	21·12	50·12	63·46	71·24	29
30	33·81	20·73	50·73	63·81	71·46	30
31	33·17	20·35	51·35	64·17	71·70	31
32	32·53	19·96	51·96	64·53	71·92	32
33	31·88	19·57	52·57	64·88	72·14	33
34	31·23	19·19	53·19	65·23	72·38	34
35	30·59	18·80	53·80	65·59	72·60	35
36	29·94	18·42	54·42	65·94	72·84	36
37	29·29	18·03	55·03	66·29	73·06	37
38	28·64	17·65	55·65	66·64	73·30	38
39	27·99	17·26	56·26	66·99	73·52	39
40	27·34	16·88	56·88	67·34	73·76	40
41	26·69	16·50	57·50	67·69	74·00	41
42	26·03	16·12	58·12	68·03	74·24	42
43	25·38	15·74	58·74	68·38	74·48	43
44	24·72	15·36	59·36	68·72	74·72	44
45	24·06	14·98	59·98	69·06	74·96	45
46	23·40	14·60	60·60	69·40	75·20	46
47	22·74	14·23	61·23	69·74	75·46	47
48	22·08	13·85	61·85	70·08	75·70	48
49	21·42	13·48	62·48	70·42	75·96	49

YEARLY TABLE:—FEMALES.

The **Mean Afterlifetime** (or the Expectation of Life) of **Females** of the Age x, and of **Females** of the Age x and upwards; also the **Mean Ages of the Living** and the **Mean Age at Death.**

Age (or past Life-time).	**Mean Afterlifetime of Females** of the Age x.	**Mean Afterlifetime** of **Females** of the Age x and upwards.	**Mean Age** of **Females living** of the Age x and upwards.	**Mean Age** at **Death.**		**Age** (or past Life-time).
				Of **Females actually living** at the Age x.	Of **Females actually living** at the Age x and upwards.	
x	$E_x = \frac{Q_x}{l_x}$	$E'_x = \frac{Y_x}{Q_x}$	$x + E'_x$	$x + E_x$	$x + 2\,E'_x$	x
	Years.	Years.	Years.	Years.	Years.	
50	20·75	13·11	63·11	70·75	76·22	50
51	20·09	12·75	63·75	71·09	76·50	51
52	19·42	12·38	64·38	71·42	76·76	52
53	18·75	12·02	65·02	71·75	77·04	53
54	18·08	11·66	65·66	72·08	77·32	54
55	17·43	11·31	66·31	72·43	77·62	55
56	16·79	10·96	66·96	72·79	77·92	56
57	16·17	10·62	67·62	73·17	78·24	57
58	15·55	10·28	68·28	73·55	78·56	58
59	14·94	9·94	68·94	73·94	78·88	59
60	14·34	9·61	69·61	74·34	79·22	60
61	13·75	9·28	70·28	74·75	79·56	61
62	13·17	8·96	70·96	75·17	79·92	62
63	12·60	8·64	71·64	75·60	80·28	63
64	12·05	8·33	72·33	76·05	80·66	64
65	11·51	8·02	73·02	76·51	81·04	65
66	10·98	7·72	73·72	76·98	81·44	66
67	10·47	7·42	74·42	77·47	81·84	67
68	9·97	7·14	75·14	77·97	82·28	68
69	9·48	6·86	75·86	78·48	82·72	69
70	9·02	6·58	76·58	79·02	83·16	70
71	8·57	6·32	77·32	79·57	83·64	71
72	8·13	6·06	78·06	80·13	84·12	72
73	7·71	5·80	78·80	80·71	84·60	73
74	7·31	5·56	79·56	81·31	85·12	74
75	6·93	5·32	80·32	81·93	85·64	75
76	6·56	5·09	81·09	82·56	86·18	76
77	6·21	4·87	81·87	83·21	86·74	77
78	5·88	4·66	82·66	83·88	87·32	78
79	5·56	4·45	83·45	84·56	87·90	79
80	5·26	4·25	84·25	85·26	88·50	80
81	4·98	4·06	85·06	85·98	89·12	81
82	4·71	3·88	85·88	86·71	89·76	82
83	4·45	3·70	86·70	87·45	90·40	83
84	4·21	3·53	87·53	88·21	91·06	84
85	3·98	3·37	88·37	88·98	91·74	85
86	3·76	3·22	89·22	89·76	92·44	86
87	3·56	3·07	90·07	90·56	93·14	87
88	3·36	2·93	90·93	91·36	93·86	88
89	3·18	2·79	91·79	92·18	94·58	89
90	3·01	2·66	92·66	93·01	95·32	90
91	2·85	2·54	93·54	93·85	96·08	91
92	2·70	2·43	94·43	94·70	96·86	92
93	2·55	2·32	95·32	95·55	97·64	93
94	2·42	2·21	96·21	96·42	98·42	94
95	2·29	2·11	97·11	97·29	99·22	95
96	2·17	2·02	98·02	98·17	100·04	96
97	2·06	1·93	98·93	99·06	100·86	97
98	1·96	1·84	99·84	99·96	101·68	98
99	1·86	1·76	100·76	100·86	102·52	99
100	1·76	1·69	101·69	101·76	103·38	100

YEARLY TABLE:—MALES and FEMALES.

Logarithms of the Series $p_x = \lambda$ probability of living *one year* after Age x.

MALES.				FEMALES.			
Age (x)	$\lambda\ p_x$	**Age** (x)	$\lambda\ p_x$	**Age** (x)	$\lambda\ p_x$	**Age** (x)	$\lambda\ p_x$
0	$\bar{1}$·9224164	55	$\bar{1}$·9892057	0	$\bar{1}$·9371604	55	$\bar{1}$·9907919
1	$\bar{1}$·9711377	56	$\bar{1}$·9886306	1	$\bar{1}$·9722410	56	$\bar{1}$·9901864
2	$\bar{1}$·9843053	57	$\bar{1}$·9879971	2	$\bar{1}$·9843554	57	$\bar{1}$·9895440
3	$\bar{1}$·9895169	58	$\bar{1}$·9872950	3	$\bar{1}$·9893710	58	$\bar{1}$·9888536
4	$\bar{1}$·9921913	59	$\bar{1}$·9865139	4	$\bar{1}$·9922523	59	$\bar{1}$·9881047
5	$\bar{1}$·9940574	60	$\bar{1}$·9856433	5	$\bar{1}$·9941950	60	$\bar{1}$·9872859
6	$\bar{1}$·9952751	61	$\bar{1}$·9846731	6	$\bar{1}$·9953928	61	$\bar{1}$·9863865
7	$\bar{1}$·9960044	62	$\bar{1}$·9835929	7	$\bar{1}$·9960392	62	$\bar{1}$·9853955
8	$\bar{1}$·9966712	63	$\bar{1}$·9823924	8	$\bar{1}$·9966496	63	$\bar{1}$·9843019
9	$\bar{1}$·9971834	64	$\bar{1}$·9810612	9	$\bar{1}$·9971161	64	$\bar{1}$·9830950
10	$\bar{1}$·9975541	65	$\bar{1}$·9795890	10	$\bar{1}$·9974514	65	$\bar{1}$·9817635
11	$\bar{1}$·9977966	66	$\bar{1}$·9779656	11	$\bar{1}$·9976674	66	$\bar{1}$·9802967
12	$\bar{1}$·9979241	67	$\bar{1}$·9761804	12	$\bar{1}$·9977764	67	$\bar{1}$·9786837
13	$\bar{1}$·9979498	68	$\bar{1}$·9742234	13	$\bar{1}$·9977906	68	$\bar{1}$·9769134
14	$\bar{1}$·9978867	69	$\bar{1}$·9720840	14	$\bar{1}$·9977224	69	$\bar{1}$·9749749
15	$\bar{1}$·9977484	70	$\bar{1}$·9697520	15	$\bar{1}$·9975839	70	$\bar{1}$·9728573
16	$\bar{1}$·9975478	71	$\bar{1}$·9672170	16	$\bar{1}$·9973872	71	$\bar{1}$·9705496
17	$\bar{1}$·9972982	72	$\bar{1}$·9644689	17	$\bar{1}$·9971448	72	$\bar{1}$·9680410
18	$\bar{1}$·9970127	73	$\bar{1}$·9614970	18	$\bar{1}$·9968687	73	$\bar{1}$·9653205
19	$\bar{1}$·9967048	74	$\bar{1}$·9582913	19	$\bar{1}$·9965712	74	$\bar{1}$·9623770
20	$\bar{1}$·9963874	75	$\bar{1}$·9548413	20	$\bar{1}$·9962646	75	$\bar{1}$·9591998
21	$\bar{1}$·9963071	76	$\bar{1}$·9511367	21	$\bar{1}$·9961671	76	$\bar{1}$·9557777
22	$\bar{1}$·9962293	77	$\bar{1}$·9471672	22	$\bar{1}$·9960729	77	$\bar{1}$·9521001
23	$\bar{1}$·9961534	78	$\bar{1}$·9429225	23	$\bar{1}$·9959817	78	$\bar{1}$·9481557
24	$\bar{1}$·9960785	79	$\bar{1}$·9383922	24	$\bar{1}$·9958929	79	$\bar{1}$·9439338
25	$\bar{1}$·9960037	80	$\bar{1}$·9335660	25	$\bar{1}$·9958060	80	$\bar{1}$·9394234
26	$\bar{1}$·9959282	81	$\bar{1}$·9284336	26	$\bar{1}$·9957206	81	$\bar{1}$·9346135
27	$\bar{1}$·9958512	82	$\bar{1}$·9229846	27	$\bar{1}$·9956362	82	$\bar{1}$·9294933
28	$\bar{1}$·9957718	83	$\bar{1}$·9172088	28	$\bar{1}$·9955525	83	$\bar{1}$·9240517
29	$\bar{1}$·9956892	84	$\bar{1}$·9110958	29	$\bar{1}$·9954688	84	$\bar{1}$·9182778
30	$\bar{1}$·9956026	85	$\bar{1}$·9046352	30	$\bar{1}$·9953847	85	$\bar{1}$·9121607
31	$\bar{1}$·9955111	86	$\bar{1}$·8978169	31	$\bar{1}$·9952998	86	$\bar{1}$·9056896
32	$\bar{1}$·9954139	87	$\bar{1}$·8906302	32	$\bar{1}$·9952135	87	$\bar{1}$·8988532
33	$\bar{1}$·9953102	88	$\bar{1}$·8830651	33	$\bar{1}$·9951255	88	$\bar{1}$·8916408
34	$\bar{1}$·9951991	89	$\bar{1}$·8751113	34	$\bar{1}$·9950352	89	$\bar{1}$·8840415
35	$\bar{1}$·9950798	90	$\bar{1}$·8667581	35	$\bar{1}$·9949422	90	$\bar{1}$·8760443
36	$\bar{1}$·9949514	91	$\bar{1}$·8579955	36	$\bar{1}$·9948460	91	$\bar{1}$·8676383
37	$\bar{1}$·9948132	92	$\bar{1}$·8488131	37	$\bar{1}$·9947461	92	$\bar{1}$·8588123
38	$\bar{1}$·9946643	93	$\bar{1}$·8392005	38	$\bar{1}$·9946421	93	$\bar{1}$·8495557
39	$\bar{1}$·9945038	94	$\bar{1}$·8291475	39	$\bar{1}$·9945336	94	$\bar{1}$·8398575
40	$\bar{1}$·9943309	95	$\bar{1}$·8186437	40	$\bar{1}$·9944199	95	$\bar{1}$·8297066
41	$\bar{1}$·9941448	96	$\bar{1}$·8076787	41	$\bar{1}$·9943007	96	$\bar{1}$·8190921
42	$\bar{1}$·9939446	97	$\bar{1}$·7962424	42	$\bar{1}$·9941755	97	$\bar{1}$·8080033
43	$\bar{1}$·9937297	98	$\bar{1}$·7843241	43	$\bar{1}$·9940439	98	$\bar{1}$·7964288
44	$\bar{1}$·9934989	99	$\bar{1}$·7719138	44	$\bar{1}$·9939053	99	$\bar{1}$·7843582
45	$\bar{1}$·9932516	100	$\bar{1}$·7590011	45	$\bar{1}$·9937593	100	$\bar{1}$·7717801
46	$\bar{1}$·9929870	101	$\bar{1}$·7455756	46	$\bar{1}$·9936054	101	$\bar{1}$·7586838
47	$\bar{1}$·9927040	102	$\bar{1}$·7316270	47	$\bar{1}$·9934432	102	$\bar{1}$·7450583
48	$\bar{1}$·9924020	103	$\bar{1}$·7171451	48	$\bar{1}$·9932722	103	$\bar{1}$·7308927
49	$\bar{1}$·9920802	104	$\bar{1}$·7021192	49	$\bar{1}$·9930918	104	$\bar{1}$·7161761
50	$\bar{1}$·9917376	105	$\bar{1}$·6865395	50	$\bar{1}$·9929018	105	$\bar{1}$·7008974
51	$\bar{1}$·9911290	106	$\bar{1}$·6703952	51	$\bar{1}$·9927015	106	$\bar{1}$·6850457
52	$\bar{1}$·9906840	107	$\bar{1}$·6536762	52	$\bar{1}$·9924906	107	$\bar{1}$·6686102
53	$\bar{1}$·9902221	108	$\bar{1}$·6363723	53	$\bar{1}$·9922685	108	$\bar{1}$·6515799
54	$\bar{1}$·9897327			54	$\bar{1}$·9913715		

NOTE.—$\lambda p_x = \lambda l_{x+1} - \lambda l_x$.

SINGLE LIVES.

YEARLY TABLE.

MALES.

With Interest.

YEARLY TABLE:—MALES.

Logarithms of the Series D_x; Rates of Interest 3, $3\frac{1}{4}$, $3\frac{1}{3}$, and $3\frac{1}{2}$ per Cent.

λD_x							
Age (x)	**3 per cent.**	**Age** (x)	**$3\frac{1}{4}$ per cent.**	**Age** (x)	**$3\frac{1}{3}$ per cent.**	**Age** (x)	**$3\frac{1}{2}$ per cent.**
0	5·7090538	0	5·7090538	0	5·7090538	0	5·7090538
1	5·6186330	1	5·6175801	1	5·6172298	1	5·6165299
2	5·5769335	2	5·5748278	2	5·5741270	2	5·5727272
3	5·5484015	3	5·5452430	3	5·5441919	3	5·5420922
4	5·5250812	4	5·5208699	4	5·5194683	4	5·5166687
5	5·5044353	5	5·4991711	5	5·4974192	5	5·4939197
6	5·4856554	6	5·4793384	6	5·4772361	6	5·4730367
7	5·4680933	7	5·4607234	7	5·4582708	7	5·4533714
8	5·4512605	8	5·4428378	8	5·4400347	8	5·4344355
9	5·4350945	9	5·4256189	9	5·4224655	9	5·4161663
10	5·4194406	10	5·4089123	10	5·4054085	10	5·3984094
11	5·4041575	11	5·3925763	11	5·3887222	11	5·3810232
12	5·3891169	12	5·3764829	12	5·3722784	12	5·3638794
13	5·3742038	13	5·3605170	13	5·3559620	13	5·3468632
14	5·3593163	14	5·3445766	14	5·3396713	14	5·3298726
15	5·3443659	15	5·3285733	15	5·3233177	15	5·3128190
16	5·3292770	16	5·3124317	16	5·3068256	16	5·2956270
17	5·3139876	17	5·2960894	17	5·2901329	17	5·2782345
18	5·2984485	18	5·2794975	18	5·2731907	18	5·2605923
19	5·2826241	19	5·2626202	19	5·2559630	19	5·2426647
20	5·2664916	20	5·2454349	20	5·2384273	20	5·2244291
21	5·2500418	21	5·2279323	21	5·2205743	21	5·2058762
22	5·2335116	22	5·2103492	22	5·2026409	22	5·1872429
23	5·2169037	23	5·1926885	23	5·1846298	23	5·1685318
24	5·2002199	24	5·1749519	24	5·1665428	24	5·1497449
25	5·1834612	25	5·1571403	25	5·1483808	25	5·1308831
26	5·1666276	26	5·1392539	26	5·1301441	26	5·1119464
27	5·1497186	27	5·1212921	27	5·1118318	27	5·0929343
28	5·1327326	28	5·1032532	28	5·0934426	28	5·0738451
29	5·1156672	29	5·0851349	29	5·0749739	29	5·0546765
30	5·0985192	30	5·0669341	30	5·0564227	30	5·0354254
31	5·0812845	31	5·0486466	31	5·0377849	31	5·0160877
32	5·0639584	32	5·0302677	32	5·0190556	32	4·9966584
33	5·0465351	33	5·0117915	33	5·0002290	33	4·9771320
34	5·0290081	34	4·9932117	34	4·9812988	34	4·9575018
35	5·0113700	35	4·9745207	35	4·9622575	35	4·9377606
36	4·9936125	36	4·9557104	36	4·9430968	36	4·9179000
37	4·9757267	37	4·9367718	37	4·9238078	37	4·8979111
38	4·9577027	38	4·9176949	38	4·9043805	38	4·8777839
39	4·9395297	39	4·8984691	39	4·8848044	39	4·8575078
40	4·9211963	40	4·8790828	40	4·8650677	40	4·8370713
41	4·9026899	41	4·8595237	41	4·8451582	41	4·8164618
42	4·8839975	42	4·8397784	42	4·8250625	42	4·7956663
43	4·8651050	43	4·8198331	43	4·8047668	43	4·7746706
44	4·8459974	44	4·7996727	44	4·7842560	44	4·7534599
45	4·8266591	45	4·7792815	45	4·7635145	45	4·7320185
46	4·8070735	46	4·7586431	46	4·7425256	46	4·7103298
47	4·7872232	47	4·7377399	47	4·7212721	47	4·6883763
48	4·7670900	48	4·7165539	48	4·6997357	48	4·6661400
49	4·7466548	49	4·6950659	49	4·6778973	49	4·6436017
50	4·7258978	50	4·6732560	50	4·6557371	50	4·6207416
51	4·7047982	51	4·6511036	51	4·6332342	51	4·5975388
52	4·6830899	52	4·6283424	52	4·6101227	52	4·5737274
53	4·6609367	53	4·6051364	53	4·5865663	53	4·5494711
54	4·6383216	54	4·5814684	54	4·5625480	54	4·5247528

YEARLY TABLE:—MALES.

Logarithms of the Series D_x; Rates of Interest 3, $3\frac{1}{4}$, $3\frac{1}{3}$, and $3\frac{1}{2}$ per Cent.

λD_x							
Age (x)	**3 per cent.**	**Age** (x)	**$3\frac{1}{4}$ per cent.**	**Age** (x)	**$3\frac{1}{3}$ per cent.**	**Age** (x)	**$3\frac{1}{2}$ per cent.**
55	4·6152171	55	4·5573111	55	4·5380402	55	4·4995452
56	4·5915855	56	4·5326268	56	4·5130055	56	4·4738105
57	4·5673789	57	4·5073673	57	4·4873956	57	4·4475008
58	4·5425388	58	4·4814744	58	4·4611523	58	4·4205576
59	4·5169966	59	4·4548793	59	4·4342069	59	4·3929122
60	4·4906732	60	4·4275031	60	4·4064803	60	4·3644857
61	4·4634793	61	4·3992563	61	4·3778831	61	4·3351886
62	4·4353151	62	4·3700394	62	4·3483158	62	4·3049214
63	4·4060708	63	4·3397422	63	4·3176683	63	4·2735739
64	4·3756260	64	4·3082445	64	4·2858202	64	4·2410260
65	4·3438500	65	4·2754157	65	4·2526410	65	4·2071468
66	4·3106018	66	4·2411147	66	4·2179896	66	4·1717955
67	4·2757301	67	4·2051902	67	4·1817147	67	4·1348207
68	4·2390733	68	4·1674805	68	4·1436547	68	4·0960608
69	4·2004595	69	4·1278138	69	4·1036376	69	4·0553438
70	4·1597062	70	4·0860078	70	4·0614812	70	4·0124875
71	4·1166210	71	4·0418697	71	4·0169927	71	3·9672991
72	4·0710008	72	3·9951967	72	3·9699694	72	3·9195758
73	4·0226325	73	3·9457755	73	3·9201978	73	3·8691043
74	3·9712923	74	3·8933825	74	3·8674544	74	3·8156610
75	3·9167463	75	3·8377837	75	3·8115052	75	3·7590120
76	3·8587504	76	3·7787349	76	3·7521061	76	3·6989129
77	3·7970499	77	3·7159816	77	3·6890023	77	3·6351092
78	3·7313799	78	3·6492587	78	3·6219291	78	3·5673361
79	3·6614651	79	3·5782911	79	3·5506111	79	3·4953182
80	3·5870201	80	3·5027933	80	3·4747629	80	3·4187701
81	3·5077489	81	3·4224692	81	3·3940884	81	3·3373957
82	3·4233452	82	3·3370127	82	3·3082816	82	3·2508890
83	3·3334926	83	3·2461073	83	3·2170258	83	3·1589333
84	3·2378642	84	3·1494261	84	3·1199942	84	3·0612017
85	3·1361228	85	3·0466318	85	3·0168495	85	2·9573572
86	3·0279208	86	2·9373770	86	2·9072443	86	2·8470521
87	2·9129004	87	2·8213038	87	2·7908207	87	2·7299285
88	2·7906934	88	2·6980439	88	2·6672105	88	2·6056184
89	2·6609214	89	2·5672190	89	2·5360352	89	2·4737432
90	2·5231953	90	2·4284402	90	2·3969060	90	2·3339141
91	2·3771162	91	2·2813082	91	2·2494236	91	2·1857318
92	2·2222745	92	2·1254136	92	2·0931787	92	2·0287870
93	2·0582504	93	1·9603367	93	1·9277514	93	1·8626597
94	1·8846137	94	1·7856472	94	1·7527115	94	1·6869199
95	1·7009240	95	1·6009046	95	1·5676186	95	1·5011271
96	1·5067304	96	1·4056582	96	1·3720218	96	1·3048304
97	1·3015719	97	1·1994469	97	1·1654601	97	1·0975688
98	1·0849770	98	0·9817992	98	0·9474620	98	0·8788708
99	0·8564639	99	0·7522333	99	0·7175457	99	0·6482546
100	0·6155406	100	0·5102570	100	0·4752191	100	0·4052280
101	0·3617044	101	0·2553681	101	0·2199797	101	0·1492888
102	0·0944428	102	9·9870536	102	9·9513149	102	9·8799241
103	9·8132326	103	9·7047906	103	9·6687015	103	9·5966107
104	9·5175404	104	9·4080455	104	9·3716060	104	9·2988154
105	9·2068224	105	9·0962747	105	9·0594849	105	8·9859943
106	8·8805246	106	8·7689241	106	8·7317839	106	8·6575934
107	8·5380826	107	8·4254292	107	8·3879386	107	8·3130482
108	8·1789217	108	8·0652155	108	8·0273745	108	7·9517842
109	7·8024567	109	7·6876977	109	7·6495063	109	7·5732161

YEARLY TABLE:—MALES.

Logarithms of the Series D_x; Rates of Interest $3\frac{3}{4}$, 4, 5, and 6 per Cent.

λ D_x

Age (x)	$3\frac{3}{4}$ per cent.	Age (x)	4 per cent.	Age (x)	5 per cent.	Age (x)	6 per cent.
0	5·7090538	0	5·7090538	0	5·7090538	0	5·7090538
1	5·6154821	1	5·6144369	1	5·6102809	1	5·6061643
2	5·5706317	2	5·5685412	2	5·5602293	2	5·5519962
3	5·5389489	3	5·5358132	3	5·5233453	3	5·5109956
4	5·5124777	4	5·5082967	4	5·4916729	4	5·4752066
5	5·4886809	5	5·4834547	5	5·4626749	5	5·4420921
6	5·4667501	6	5·4604787	6	5·4355430	6	5·4108436
7	5·4460371	7	5·4387205	7	5·4096288	7	5·3808128
8	5·4260534	8	5·4176915	8	5·3844439	8	5·3515113
9	5·4067365	9	5·3973294	9	5·3599258	9	5·3228767
10	5·3879318	10	5·3774795	10	5·3359199	10	5·2947542
11	5·3694978	11	5·3580003	11	5·3122847	11	5·2670025
12	5·3513064	12	5·3387636	12	5·2888921	12	5·2394933
13	5·3332424	13	5·3196543	13	5·2656269	13	5·2121115
14	5·3152040	14	5·3005707	14	5·2423873	14	5·1847554
15	5·2971027	15	5·2814242	15	5·2190848	15	5·1573363
16	5·2788629	16	5·2621392	16	5·1956438	16	5·1297788
17	5·2604226	17	5·2426536	17	5·1720023	17	5·1020207
18	5·2417327	18	5·2229185	18	5·1481112	18	5·0740130
19	5·2227573	19	5·2028979	19	5·1239347	19	5·0457199
20	5·2034740	20	5·1825693	20	5·0994501	20	5·0171188
21	5·1838733	21	5·1619234	21	5·0746482	21	4·9882004
22	5·1641922	22	5·1411971	22	5·0497660	22	4·9592015
23	5·1444335	23	5·1203931	23	5·0248060	23	4·9301250
24	5·1245988	24	5·0995132	24	4·9997701	24	4·9009725
25	5·1046892	25	5·0785583	25	4·9746593	25	4·8717452
26	5·0847048	26	5·0575287	26	4·9494737	26	4·8424430
27	5·0646448	27	5·0364235	27	4·9242126	27	4·8130653
28	5·0445079	28	5·0152414	28	4·8988745	28	4·7836107
29	5·0242916	29	4·9939798	29	4·8734570	29	4·7540766
30	5·0039927	30	4·9726357	30	4·8479569	30	4·7244599
31	4·9836072	31	4·9512050	31	4·8223702	31	4·6947567
32	4·9631302	32	4·9296828	32	4·7966920	32	4·6649619
33	4·9425561	33	4·9080633	33	4·7709167	33	4·6350700
34	4·9218781	34	4·8863402	34	4·7450376	34	4·6050743
35	4·9010891	35	4·8645059	35	4·7190474	35	4·5749675
36	4·8801808	36	4·8425524	36	4·6929378	36	4·5447415
37	4·8591441	37	4·8204705	37	4·6667000	37	4·5143870
38	4·8379692	38	4·7982503	38	4·6403239	38	4·4838943
39	4·8166454	39	4·7758813	39	4·6137988	39	4·4532527
40	4·7951610	40	4·7533517	40	4·5871133	40	4·4224506
41	4·7735038	41	4·7306492	41	4·5602549	41	4·3914757
42	4·7516605	42	4·7077607	42	4·5332104	42	4·3603146
43	4·7296171	43	4·6846721	43	4·5059658	43	4·3289534
44	4·7073587	44	4·6613684	44	4·4785062	44	4·2973772
45	4·6848695	45	4·6378340	45	4·4508158	45	4·2655703
46	4·6621330	46	4·6140522	46	4·4228781	46	4·2335160
47	4·6391318	47	4·5900058	47	4·3946757	47	4·2011971
48	4·6158477	48	4·5656765	48	4·3661904	48	4·1685953
49	4·5922617	49	4·5410452	49	4·3374032	49	4·1356915
50	4·5683538	50	4·5160921	50	4·3082941	50	4·1024658
51	4·5441033	51	4·4907963	51	4·2788424	51	4·0688975
52	4·5192441	52	4·4648919	52	4·2487820	52	4·0347206
53	4·4939400	53	4·4385426	53	4·2182768	53	4·0000987
54	4·4681740	54	4·4117314	54	4·1873095	54	3·9650150

YEARLY TABLE:—MALES.

Logarithms of the Series D_x; Rates of Interest $3\frac{3}{4}$, 4, 5, and 6 per Cent.

λD_x							
Age (x)	$3\frac{3}{4}$ per cent.	Age (x)	4 per cent.	Age (x)	5 per cent.	Age (x)	6 per cent.
55	4·4419186	55	4·3844308	55	4·1558530	55	3·9294418
56	4·4151362	56	4·3566031	56	4·1235694	56	3·8933417
57	4·3877787	57	4·3282004	57	4·0913107	57	3·8566664
58	4·3597877	58	4·2991642	58	4·0581185	58	3·8193577
59	4·3310946	59	4·2694258	59	4·0242242	59	3·7813468
60	4·3016203	60	4·2389063	60	3·9895487	60	3·7425547
61	4·2712755	61	4·2075163	61	3·9540027	61	3·7028922
62	4·2399605	62	4·1751560	62	3·9174865	62	3·6622594
63	4·2075653	63	4·1417156	63	3·8798901	63	3·6205465
64	4·1739696	64	4·1070746	64	3·8410932	64	3·5776330
65	4·1390427	65	4·0711025	65	3·8009651	65	3·5333583
66	4·1026436	66	4·0336582	66	3·7593649	66	3·4876715
67	4·0646211	67	3·9945904	67	3·7161411	67	3·4403312
68	4·0248134	68	3·9537375	68	3·6711323	68	3·3912058
69	3·9830187	69	3·9109276	69	3·6241663	69	3·3401233
70	3·9391446	70	3·8659782	70	3·5750610	70	3·2869014
71	3·8929084	71	3·8186969	71	3·5236237	71	3·2313475
72	3·8441374	72	3·7688806	72	3·4696515	72	3·1732587
73	3·7926181	73	3·7163161	73	3·4129310	73	3·1124217
74	3·7381271	74	3·6607798	74	3·3532388	74	3·0486129
75	3·6804303	75	3·6020377	75	3·2903408	75	2·9815983
76	3·6192834	76	3·5398457	76	3·2239928	76	2·9111337
77	3·5544320	77	3·4739491	77	3·1539402	77	2·8369046
78	3·4856111	78	3·4040829	78	3·0799181	78	2·7588259
79	3·4125455	79	3·3299721	79	3·0016513	79	2·6764425
80	3·3349496	80	3·2513309	80	2·9188541	80	2·5895288
81	3·2525275	81	3·1678636	81	2·8312308	81	2·4977890
82	3·1649730	82	3·0792638	82	2·7384751	82	2·4009167
83	3·0719695	83	2·9852151	83	2·6402705	83	2·2985955
84	2·9731902	84	2·8853906	84	2·5362900	84	2·1904984
85	2·8682979	85	2·7794531	85	2·4261965	85	2·0762884
86	2·7569450	86	2·6670550	86	2·3096424	86	1·9556177
87	2·6387738	87	2·5478385	87	2·1862700	87	1·8281287
88	2·5134159	88	2·4214354	88	2·0557109	88	1·6934531
89	2·3804929	89	2·2874672	89	1·9175867	89	1·5512123
90	2·2396160	90	2·1455450	90	1·7715086	90	1·4010177
91	2·0903860	91	1·9952698	91	1·6170774	91	1·2424699
92	1·9323934	92	1·8362319	92	1·4538836	92	1·0751596
93	1·7652184	93	1·6680117	93	1·2815074	93	0·8986668
94	1·5884309	94	1·4901789	94	1·0995187	94	0·7125615
95	1·4015903	95	1·3022931	95	0·9074769	95	0·5164031
96	1·2042459	96	1·1039034	96	0·7049313	96	0·3097409
97	0·9959365	97	0·8915488	97	0·4914207	97	0·0921138
98	0·7761907	98	0·6737578	98	0·2664738	98	9·8630503
99	0·5445267	99	0·4410486	99	0·0296086	99	9·6220685
100	0·3004525	100	0·1959291	100	9·7803331	100	9·3686765
101	0·0434654	101	9·9378969	101	9·5181449	101	9·1023717
102	9·7730529	102	9·6664391	102	9·2425312	102	8·8226415
103	9·4886919	103	9·3810328	103	8·9529689	103	8·5289626
104	9·1898488	104	9·0811445	104	8·6489247	104	8·2208018
105	8·8759799	105	8·7662304	105	8·3298546	105	7·8976152
106	8·5465312	106	8·4357365	106	7·9952048	106	7·5588487
107	8·2009384	107	8·0890984	107	7·6444107	107	7·2039381
108	7·8386265	108	7·7257413	108	7·2768976	108	6·8323085
109	7·4590107	109	7·3450802	109	6·8920806	109	6·4433749

YEARLY TABLE :—MALES.

Logarithms of the Series D_x ; Rates of Interest 7, 8, 9, and 10 per Cent.

λ D_x							
Age (x)	7 per cent.	Age (x)	8 per cent.	Age (x)	9 per cent.	Age (x)	10 per cent.
0	5·7090538	0	5·7090538	0	5·7090538	0	5·7090538
1	5·6020864	1	5·5980464	1	5·5940437	1	5·5900775
2	5·5438403	2	5·5357604	2	5·5277549	2	5·5198225
3	5·4987619	3	5·4866419	3	5·4746337	3	5·4627351
4	5·4588950	4	5·4427351	4	5·4267241	4	5·4108594
5	5·4217025	5	5·4015026	5	5·3814889	5	5·3616580
6	5·3863761	6	5·3621362	6	5·3381198	6	5·3143227
7	5·3522674	7	5·3239876	7	5·2959684	7	5·2682051
8	5·3188880	8	5·2865682	8	5·2545463	8	5·2228168
9	5·2861755	9	5·2498157	9	5·2137910	9	5·1780953
10	5·2539751	10	5·2135753	10	5·1735479	10	5·1338860
11	5·2221455	11	5·1777057	11	5·1336755	11	5·0900475
12	5·1905583	12	5·1420786	12	5·0940457	12	5·0464514
13	5·1590986	13	5·1065789	13	5·0545433	13	5·0029828
14	5·1276646	14	5·0711049	14	5·0150665	14	4·9595399
15	5·0961676	15	5·0355679	15	4·9755268	15	4·9160340
16	5·0645322	16	4·9998925	16	4·9358487	16	4·8723897
17	5·0326962	17	4·9640166	17	4·8959699	17	4·8285448
18	5·0006106	18	4·9278910	18	4·8558416	18	4·7844502
19	4·9682396	19	4·8914800	19	4·8154279	19	4·7400703
20	4·9355606	20	4·8547610	20	4·7747062	20	4·6953824
21	4·9025642	21	4·8177247	21	4·7336671	21	4·6503771
22	4·8694875	22	4·7806079	22	4·6925476	22	4·6052915
23	4·8363330	23	4·7431135	23	4·6513504	23	4·5601281
24	4·8031026	24	4·7061432	24	4·6100774	24	4·5148889
25	4·7697974	25	4·6687979	25	4·5687293	25	4·4695747
26	4·7364173	26	4·6313778	26	4·5273065	26	4·4241857
27	4·7029617	27	4·5938823	27	4·4858083	27	4·3787212
28	4·6694291	28	4·5563097	28	4·4442329	28	4·3331797
29	4·6358171	29	4·5186578	29	4·4025782	29	4·2875588
30	4·6021226	30	4·4809232	30	4·3608410	30	4·2418553
31	4·5683114	31	4·4431021	31	4·3190171	31	4·1960653
32	4·5344687	32	4·4051894	32	4·2771017	32	4·1501837
33	4·5004989	33	4·3671796	33	4·2350891	33	4·1042049
34	4·4664253	34	4·3290660	34	4·1929728	34	4·0581224
35	4·4322406	35	4·2908414	35	4·1507454	35	4·0119288
36	4·3979366	36	4·2524974	36	4·1083987	36	3·9656159
37	4·3635043	37	4·2140251	37	4·0659236	37	3·9191747
38	4·3289337	38	4·1754145	38	4·0233103	38	3·8725952
39	4·2942142	39	4·1366550	39	3·9805481	39	3·8258668
40	4·2593341	40	4·0977350	40	3·9376253	40	3·7789779
41	4·2242813	41	4·0586422	41	3·8945297	41	3·7319161
42	4·1890423	42	4·0193632	42	3·8512481	42	3·6846682
43	4·1536032	43	3·9798842	43	3·8077662	43	3·6372202
44	4·1179491	44	3·9401901	44	3·7640694	44	3·5895572
45	4·0820642	45	3·9002652	45	3·7201418	45	3·5416634
46	4·0459321	46	3·8600931	46	3·6759669	46	3·4935223
47	4·0095352	47	3·8196563	47	3·6315274	47	3·4451166
48	3·9728555	48	3·7789365	48	3·5868049	48	3·3964279
49	3·9358737	49	3·7379148	49	3·5417805	49	3·3474373
50	3·8985702	50	3·6965713	50	3·4964341	50	3·2981248
51	3·8609240	51	3·6548851	51	3·4507452	51	3·2484697
52	3·8226691	52	3·6125903	52	3·4044477	52	3·1982059
53	3·7839694	53	3·5698506	53	3·3577052	53	3·1474973
54	3·7448077	54	3·5266489	54	3·3105008	54	3·0963267

YEARLY TABLE:—MALES.

Logarithms of the Series D_x; Rates of Interest 7, 8, 9, and 10 per Cent.

λ D_x							
Age (x)	7 per cent.	Age (x)	8 per cent.	Age (x)	9 per cent.	Age (x)	10 per cent.
55	3·7051567	55	3·4829579	55	3·2628070	55	3·0446667
56	3·6649786	56	3·4387398	56	3·2145862	56	2·9924797
57	3·6242254	57	3·3939466	57	3·1657903	57	2·9397177
58	3·5828387	58	3·3485200	58	3·1163610	58	2·8863221
59	3·5407500	59	3·3023913	59	3·0662295	59	2·8322244
60	3·4978800	60	3·2554813	60	3·0153168	60	2·7773455
61	3·4541395	61	3·2077009	61	2·9635336	61	2·7215962
62	3·4094288	62	3·1589502	62	2·9107802	62	2·6648766
63	3·3636380	63	3·1091194	63	2·8569166	63	2·6070768
64	3·3166466	64	3·0580880	64	2·8019125	64	2·5480765
65	3·2683240	65	3·0057255	65	2·7455472	65	2·4877450
66	3·2185293	66	2·9518907	66	2·6877097	66	2·4259414
67	3·1671111	67	2·8964325	67	2·6282488	67	2·3625143
68	3·1139077	68	2·8391892	68	2·5670027	68	2·2973020
69	3·0587473	69	2·7799888	69	2·5037996	69	2·2301327
70	3·0014475	70	2·7186491	70	2·4384571	70	2·1608240
71	2·9418157	71	2·6549773	71	2·3707826	71	2·0891833
72	2·8796490	72	2·5887706	72	2·3005732	72	2·0150077
73	2·8147341	73	2·5198157	73	2·2276155	73	1·9380839
74	2·7468474	74	2·4478890	74	2·1516861	74	1·8581882
75	2·6757549	75	2·3727565	75	2·0725508	75	1·7750868
76	2·6012124	76	2·2941741	76	1·9899656	76	1·6885354
77	2·5229653	77	2·2118870	77	1·9036758	77	1·5982794
78	2·4407487	78	2·1256305	78	1·8134166	78	1·5040540
79	2·3542874	79	2·0351292	79	1·7189125	79	1·4055837
80	2·2632958	80	1·9400976	80	1·6198782	80	1·3025833
81	2·1674781	81	1·8402399	81	1·5160177	81	1·1947566
82	2·0665279	82	1·7352497	82	1·4070248	82	1·0817975
83	1·9601288	83	1·6248106	83	1·2925530	83	0·9633894
84	1·8479538	84	1·5085957	84	1·1723653	84	0·8392056
85	1·7296658	85	1·3862677	85	1·0460346	85	0·7089087
86	1·6049173	86	1·2574792	86	0·9132133	86	0·5721512
87	1·4733503	87	1·1218722	87	0·7736337	87	0·4285754
88	1·3345968	88	0·9790787	88	0·6268374	88	0·2778129
89	1·1882781	89	0·8287201	89	0·4724760	89	0·1194854
90	1·0340056	90	0·6704076	90	0·3101607	90	9·9532039
91	0·8713799	91	0·5037419	91	0·1394923	91	9·7785693
92	0·6999916	92	0·3283137	92	9·9600613	92	9·5951721
93	0·5194209	93	0·1437030	93	9·7714479	93	9·4025925
94	0·3292377	94	9·9494798	94	9·5732220	94	9·2004004
95	0·1290014	95	9·7452035	95	9·3649430	95	8·9881552
96	9·9182613	96	9·5304235	96	9·1461602	96	8·7654062
97	9·6965563	97	9·3046785	97	8·9164124	97	8·5316923
98	9·4634148	98	9·0674970	98	8·6752283	98	8·2865419
99	9·2183552	99	8·8183974	99	8·4221259	99	8·0294734
100	8·9608853	100	8·5568875	100	8·1566132	100	7·7599945
101	8·6905026	101	8·2824648	101	7·8781878	101	7·4776029
102	8·4066944	102	7·9946167	102	7·5863369	102	7·1817858
103	8·1089376	103	7·6928199	103	7·2805375	103	6·8720202
104	7·7966989	104	7·3765412	104	6·9602560	104	6·5477725
105	7·4694344	105	7·0452367	105	6·6249487	105	6·2084991
106	7·1265900	106	6·6983524	106	6·2740617	106	5·8536458
107	6·7676015	107	6·3353238	107	5·9070304	107	5·4826484
108	6·3918939	108	5·9555763	108	5·5232802	108	5·0919319
109	5·9988824	109	5·5585249	109	5·1222259	109	4·6899115

YEARLY TABLE:—MALES. Interest 3 per Cent.

Age (x)	D_x	N_x	S_x	C_x	M_x	R_x	Age (x)
0	511,745	9,800,236	206,018,049	81,280·58	226,301·22	3,799,711·50	0
1	415,559	9,288,491	196,217,813	25,941·18	145,020·64	3,573,410·28	1
2	377,514	8,872,932	186,929,322	13,008·74	119,079·46	3,428,389·64	2
3	353,510	8,495,418	178,056,390	8,185·63	106,070·72	3,309,310·18	3
4	335,028	8,141,908	169,560,972	5,795·87	97,885·09	3,203,239·46	4
5	319,474	7,806,880	161,419,064	4,215·06	92,089·22	3,105,354·37	5
6	305,953	7,487,406	153,612,184	3,214·15	87,874·16	3,013,265·15	6
7	293,828	7,181,453	146,124,778	2,612·94	84,660·01	2,925,390·99	7
8	282,657	6,887,625	138,943,325	2,095·38	82,047·07	2,840,730·98	8
9	272,329	6,604,968	132,055,700	1,709·18	79,951·69	2,758,683·91	9
10	262,688	6,332,639	125,450,732	1,432·56	78,242·51	2,678,732·22	10
11	253,605	6,069,951	119,118,093	1,245·65	76,809·95	2,600,489·71	11
12	244,972	5,816,346	113,048,142	1,134·46	75,564·30	2,523,679·76	12
13	236,703	5,571,374	107,231,796	1,082·25	74,429·84	2,448,115·46	13
14	228,726	5,334,671	101,660,422	1,077·69	73,347·59	2,373,685·62	14
15	220,987	5,105,945	96,325,751	1,109·86	72,269·90	2,300,338·03	15
16	213,441	4,884,958	91,219,806	1,166·47	71,160·04	2,228,068·13	16
17	206,057	4,671,517	86,334,848	1,240·58	69,993·57	2,156,908·09	17
18	198,815	4,465,460	81,663,331	1,323·06	68,752·99	2,086,914·52	18
19	191,701	4,266,645	77,197,871	1,406·89	67,429·93	2,018,161·53	19
20	184,711	4,074,944	72,931,226	1,485·79	66,023·04	1,950,731·60	20
21	177,845	3,890,233	68,856,282	1,461·82	64,537·25	1,884,708·56	21
22	171,203	3,712,388	64,966,049	1,436·98	63,075·43	1,820,171·31	22
23	164,780	3,541,185	61,253,661	1,410·87	61,638·45	1,757,095·88	23
24	158,570	3,376,405	57,712,476	1,383·62	60,227·58	1,695,457·43	24
25	152,567	3,217,835	54,336,071	1,356·77	58,843·96	1,635,229·85	25
26	146,767	3,065,268	51,118,236	1,329·86	57,487·19	1,576,385·89	26
27	141,162	2,918,501	48,052,968	1,302·93	56,157·33	1,518,898·70	27
28	135,748	2,777,339	45,134,467	1,276·86	54,854·40	1,462,741·37	28
29	130,517	2,641,591	42,357,128	1,251·62	53,577·54	1,407,886·97	29
30	125,464	2,511,074	39,715,537	1,227·16	52,325·92	1,354,309·43	30
31	120,583	2,385,610	37,204,463	1,203·84	51,098·76	1,301,983·51	31
32	115,867	2,265,027	34,818,853	1,181·60	49,894·92	1,250,884·75	32
33	111,310	2,149,160	32,553,826	1,160·73	48,713·32	1,200,989·83	33
34	106,907	2,037,850	30,404,666	1,141·14	47,552·59	1,152,276·51	34
35	102,653	1,930,943	28,366,816	1,122·74	46,411·45	1,104,723·92	35
36	98,540	1,828,290	26,435,873	1,105·44	45,288·71	1,058,312·47	36
37	94,564	1,729,750	24,607,583	1,090·16	44,183·27	1,013,023·76	37
38	90,720	1,635,186	22,877,833	1,075·46	43,093·11	968,840·49	38
39	87,002	1,544,466	21,242,647	1,062·22	42,017·65	925,747·38	39
40	83,406	1,457,464	19,698,181	1,050·33	40,955·43	883,729·73	40
41	79,926	1,374,058	18,240,717	1,039·10	39,905·10	842,774·30	41
42	76,559	1,294,132	16,866,659	1,029·03	38,866·00	802,869·20	42
43	73,300	1,217,573	15,572,527	1,020·30	37,836·97	764,003·20	43
44	70,145	1,144,273	14,354,954	1,011·74	36,816·67	726,166·23	44
45	67,090	1,074,128	13,210,681	1,004·35	35,804·93	689,349·56	45
46	64,132	1,007,038	12,136,553	997·28	34,800·58	653,544·63	46
47	61,267	942,906	11,129,515	990·99	33,803·30	618,744·05	47
48	58,491	881,639	10,186,609	984·91	32,812·31	584,940·75	48
49	55,803	823,148	9,304,970	979·04	31,827·40	552,128·44	49
50	53,198	767,345	8,481,822	973·33	30,848·36	520,301·04	50
51	50,676	714,147	7,714,477	994·65	29,875·03	489,452·68	51
52	48,205	663,471	7,000,330	993·23	28,880·38	459,577·65	52
53	45,808	615,266	6,336,859	990·04	27,887·15	430,697·27	53
54	43,483	569,458	5,721,593	986·39	26,897·11	402,810·12	54

YEARLY TABLE:—MALES. Interest 3 per Cent.

Age (x)	D_x	N_x	S_x	C_x	M_x	R_x	Age (x)
55	41,230	525,975	5,152,135	982·69	25,910·72	375,913·01	55
56	39,047	484,745	4,626,160	979·48	24,928·03	350,002·29	56
57	36,930	445,698	4,141,415	977·42	23,948·55	325,074·26	57
58	34,877	408,768	3,695,717	976·22	22,971·13	301,125·71	58
59	32,885	373,891	3,286,949	976·30	21,994·91	278,154·58	59
60	30,951	341,006	2,913,058	977·04	21,018·61	256,159·67	60
61	29,072	310,055	2,572,052	978·82	20,041·57	235,141·06	61
62	27,247	280,983	2,261,997	980·75	19,062·75	215,099·49	62
63	25,472	253,736	1,981,014	982·50	18,082·00	196,036·74	63
64	23,748	228,264	1,727,278	983·90	17,099·50	177,954·74	64
65	22,072	204,516	1,499,014	983·81	16,115·60	160,855·24	65
66	20,446	182,444	1,294,498	981·93	15,131·79	144,739·64	66
67	18,868	161,998	1,112,054	977·72	14,149·86	129,607·85	67
68	17,341	143,130	950,056	970·18	13,172·14	115,457·99	68
69	15,866	125,789	806,926	958·98	12,201·96	102,285·85	69
70	14,445	109,923	681,137	943·55	11,242·98	90,083·89	70
71	13,080	95,478	571,214	923·33	10,299·43	78,840·91	71
72	11,776	82,398	475,736	898·06	9,376·10	68,541·48	72
73	10,535	70,622	393,338	867·75	8,478·04	59,165·38	73
74	9,360·4	60,086·9	322,716·4	832·23	7,610·29	50,687·34	74
75	8,255·5	50,726·5	262,629·5	791·49	6,778·06	43,077·05	75
76	7,223·5	42,471·0	211,903·0	746·36	5,986·57	36,298·99	76
77	6,266·9	35,247·5	169,432·0	696·91	5,240·21	30,312·42	77
78	5,387·4	28,980·6	134,184·5	644·18	4,543·30	25,072·21	78
79	4,586·3	23,593·2	105,203·9	588·86	3,899·12	20,528·91	79
80	3,863·8	19,006·9	81,610·7	532·11	3,310·26	16,629·79	80
81	3,219·2	15,143·1	62,603·8	474·89	2,778·15	13,319·53	81
82	2,650·6	11,923·9	47,460·7	418·14	2,303·26	10,541·38	82
83	2,155·2	9,273·3	35,536·8	363·13	1,885·12	8,238·12	83
84	1,729·3	7,118·1	26,263·5	310·81	1,521·99	6,353·00	84
85	1,368·1	5,388·8	19,145·4	261·93	1,211·18	4,831·01	85
86	1,066·4	4,020·7	13,756·6	217·01	949·25	3,619·83	86
87	818·28	2,954·30	9,735·92	176·86	732·24	2,670·58	87
88	617·58	2,136·02	6,781·62	141·53	555·38	1,938·34	88
89	458·06	1,518·44	4,645·60	111·19	413·85	1,382·96	89
90	333·58	1,060·38	3,127·16	85·54	302·66	969·11	90
91	238·30	726·80	2,066·78	64·53	217·12	666·45	91
92	166·83	488·50	1,339·98	47·61	152·59	449·33	92
93	114·35	321·67	851·48	34·36	104·98	296·74	93
94	76·668	207·323	529·811	24·19	70·62	191·76	94
95	50·225	130·655	322·488	16·69	46·43	121·14	95
96	32·117	80·430	191·833	11·14	29·74	74·71	96
97	20·025	48·313	111·403	7·29	18·60	44·97	97
98	12·161	28·288	63·090	4·61	11·31	26·37	98
99	7·1856	16·1271	34·8024	2·86	6·70	15·06	99
100	4·1261	8·9415	18·6753	1·67	3·84	8·36	100
101	2·2999	4·8154	9·7338	1·03	2·17	4·52	101
102	1·2429	2·5155	4·9184	·52	1·14	2·35	102
103	·6505	1·2726	2·4029	·32	·62	1·21	103
104	·3293	·6221	1·1303	·13	·30	·59	104
105	·1610	·2928	·5082	·09	·17	·29	105
106	·0759	·1318	·2154	·04	·08	·12	106
107	·0345	·0559	·0836	·04	·04	·04	107
108	·0151	·0214	·0277	...	...	...	108
109	·0063	·0063	·0063	...	...	...	109

YEARLY TABLE:—MALES. Interest 3 per Cent.

Age (x)	λ D_x	λ N_x	λ M_x	Age (x)	λ D_x	λ N_x	λ M_x
0	5·7090538	6·9912366	5·3546869	55	4·6152171	5·7209651	4·4134795
1	5·6186330	6·9679452	5·1614298	56	4·5915855	5·6855134	4·3966879
2	5·5769335	6·9480672	5·0758370	57	4·5673789	5·6490407	4·3792792
3	5·5484015	6·9291847	5·0255955	58	4·5425388	5·6114769	4·3611824
4	5·5250812	6·9107262	4·9907165	59	4·5169966	5·5727450	4·3423222
5	5·5044353	6·8924775	4·9642088	60	4·4906732	5·5327620	4·3226040
6	5·4856554	6·8743314	4·9438612	61	4·4634793	5·4914387	4·3019318
7	5·4680933	6·8562124	4·9276784	62	4·4353151	5·4486801	4·2801855
8	5·4512605	6·8380695	4·9140631	63	4·4060708	5·4043821	4·2572465
9	5·4350945	6·8198707	4·9028276	64	4·3756260	5·3584374	4·2329834
10	5·4194406	6·8015847	4·8934428	65	4·3438500	5·3107273	4·2072465
11	5·4041575	6·7831852	4·8854175	66	4·3106018	5·2611296	4·1798903
12	5·3891169	6·7646503	4·8783166	67	4·2757301	5·2095096	4·1507521
13	5·3742038	6·7459623	4·8717470	68	4·2390733	5·1557307	4·1196563
14	5·3593163	6·7271077	4·8653859	69	4·2004595	5·0996427	4·0864296
15	5·3443659	6·7080761	4·8589575	70	4·1597062	5·0410886	4·0508815
16	5·3292770	6·6888609	4·8522361	71	4·1166210	4·9799033	4·0128132
17	5·3139876	6·6694579	4·8450581	72	4·0710008	4·9159167	3·9720222
18	5·2984485	6·6498662	4·8372917	73	4·0226325	4·8489400	3·9282954
19	5·2826241	6·6300865	4·8288528	74	3·9712923	4·7787798	3·8814012
20	5·2664916	6·6101216	4·8196956	75	3·9167463	4·7052349	3·8311054
21	5·2500418	6·5899756	4·8098104	76	3·8587504	4·6280925	3·7771780
22	5·2335116	6·5696534	4·7998602	77	3·7970499	4·5471284	3·7193487
23	5·2169037	6·5491486	4·7898517	78	3·7313799	4·4621074	3·6573714
24	5·2002199	6·5284546	4·7797954	79	3·6614651	4·3727869	3·5909666
25	5·1834612	6·5075638	4·7697019	80	3·5870201	4·2789113	3·5198621
26	5·1666276	6·4864684	4·7595711	81	3·5077489	4·1802148	3·4437557
27	5·1497186	6·4651599	4·7494064	82	3·4233452	4·0764184	3·3623430
28	5·1327326	6·4436289	4·7392115	83	3·3334926	3·9672343	3·2753390
29	5·1156672	6·4218657	4·7289828	84	3·2378642	3·8523641	3·1824118
30	5·0985192	6·3998595	4·7187169	85	3·1361228	3·7314921	3·0832087
31	5·0812845	6·3775994	4·7084104	86	3·0279208	3·6043017	2·9773806
32	5·0639584	6·3550733	4·6980563	87	2·9129004	3·4704546	2·8646534
33	5·0465351	6·3322687	4·6876478	88	2·7906934	3·3296053	2·7445902
34	5·0290081	6·3091723	4·6771742	89	2·6609214	3·1813976	2·6168430
35	5·0113700	6·2857695	4·6666252	90	2·5231953	3·0254615	2·4809550
36	4·9936125	6·2620451	4·6559899	91	2·3771162	2·8614149	2·3366998
37	4·9757267	6·2379834	4·6452579	92	2·2222745	2·6888646	2·1835261
38	4·9577027	6·2135672	4·6344078	93	2·0582504	2·5074106	2·0211066
39	4·9395297	6·1887784	4·6234317	94	1·8846137	2·3166475	1·8489277
40	4·9211963	6·1635979	4·6123114	95	1·7009240	2·1161261	1·6667987
41	4·9026899	6·1380050	4·6010284	96	1·5067304	1·9054181	1·4733410
42	4·8839975	6·1119786	4·5895698	97	1·3015719	1·6840640	1·2695129
43	4·8651050	6·0854951	4·5779164	98	1·0849770	1·4516022	1·0534626
44	4·8459974	6·0585297	4·5660445	99	0·8564639	1·2075563	0·8260748
45	4·8266591	6·0310560	4·5539429	100	0·6155406	0·9514104	0·5843312
46	4·8070735	6·0030459	4·5415865	101	0·3617044	0·6826324	0·3364597
47	4·7872232	5·9744684	4·5289591	102	0·0944428	0·4006243	0·0569049
48	4·7670900	5·9452908	4·5160368	103	$\bar{1}$·8132326	0·1046919	$\bar{1}$·7923917
49	4·7466548	5·9154779	4·5028011	104	$\bar{1}$·5175404	$\bar{1}$·7938602	$\bar{1}$·4771213
50	4·7258978	5·8849907	4·4892321	105	$\bar{1}$·2068224	$\bar{1}$·4665711	$\bar{1}$·2304489
51	4·7047982	5·8537876	4·4753083	106	$\bar{2}$·8805246	$\bar{1}$·1199154	$\bar{2}$·9030900
52	4·6830899	5·8218220	4·4606029	107	$\bar{2}$·5380826	$\bar{2}$·7474118	$\bar{2}$·6020600
53	4·6609367	5·7890629	4·4454042	108	$\bar{2}$·1789217	$\bar{2}$·3304138	...
54	4·6383216	5·7554617	4·4297056	109	$\bar{3}$·8024567	$\bar{3}$·7993405	...

YEARLY TABLE:—MALES. Interest 3 per Cent.

Age (x)	$\lambda\left(\frac{N_x}{D_x}\right)=\lambda A_x$	$\lambda\left(\frac{M_x}{D_x}\right)=\lambda \Pi_x$	$\lambda\left(\frac{M_x}{N_x}\right)=\lambda \pi_x$	Age (x)	$\lambda\left(\frac{N_x}{D_x}\right)=\lambda A_x$	$\lambda\left(\frac{M_x}{D_x}\right)=\lambda \Pi_x$	$\lambda\left(\frac{M_x}{N_x}\right)=\lambda \pi_x$
0	1.2821828	$\bar{1}.6456331$	$\bar{2}.3634503$	50	1.1590929	$\bar{1}.7633343$	$\bar{2}.6042414$
1	1.3493122	$\bar{1}.5427968$	$\bar{2}.1934846$	51	1.1489894	$\bar{1}.7705101$	$\bar{2}.6215207$
2	1.3711337	$\bar{1}.4989035$	$\bar{2}.1277698$	52	1.1387321	$\bar{1}.7775130$	$\bar{2}.6387809$
3	1.3807832	$\bar{1}.4771940$	$\bar{2}.0964108$	53	1.1281262	$\bar{1}.7844675$	$\bar{2}.6563413$
4	1.3856450	$\bar{1}.4656353$	$\bar{2}.0799903$	54	1.1171401	$\bar{1}.7913840$	$\bar{2}.6742439$
5	1.3880422	$\bar{1}.4597735$	$\bar{2}.0717313$	55	1.1057480	$\bar{1}.7982624$	$\bar{2}.6925144$
6	1.3886760	$\bar{1}.4582058$	$\bar{2}.0695298$	56	1.0939279	$\bar{1}.8051024$	$\bar{2}.7111745$
7	1.3881191	$\bar{1}.4595851$	$\bar{2}.0714660$	57	1.0816618	$\bar{1}.8119003$	$\bar{2}.7302385$
8	1.3868090	$\bar{1}.4628026$	$\bar{2}.0759936$	58	1.0689381	$\bar{1}.8186436$	$\bar{2}.7497055$
9	1.3847762	$\bar{1}.4677331$	$\bar{2}.0829569$	59	1.0557484	$\bar{1}.8253256$	$\bar{2}.7695772$
10	1.3821441	$\bar{1}.4740022$	$\bar{2}.0918581$	60	1.0420888	$\bar{1}.8319308$	$\bar{2}.7898420$
11	1.3790277	$\bar{1}.4812600$	$\bar{2}.1022323$	61	1.0279594	$\bar{1}.8384525$	$\bar{2}.8104931$
12	1.3755334	$\bar{1}.4891997$	$\bar{2}.1136663$	62	1.0133650	$\bar{1}.8448704$	$\bar{2}.8315054$
13	1.3717585	$\bar{1}.4975432$	$\bar{2}.1257847$	63	0.9983113	$\bar{1}.8511757$	$\bar{2}.8528644$
14	1.3677914	$\bar{1}.5060696$	$\bar{2}.1382782$	64	0.9828114	$\bar{1}.8573574$	$\bar{2}.8745460$
15	1.3637102	$\bar{1}.5145916$	$\bar{2}.1508814$	65	0.9668773	$\bar{1}.8633965$	$\bar{2}.8965192$
16	1.3595839	$\bar{1}.5229591$	$\bar{2}.1633752$	66	0.9505278	$\bar{1}.8692885$	$\bar{2}.9187607$
17	1.3554703	$\bar{1}.5310705$	$\bar{2}.1756002$	67	0.9337795	$\bar{1}.8750220$	$\bar{2}.9412425$
18	1.3514177	$\bar{1}.5388432$	$\bar{2}.1874255$	68	0.9166574	$\bar{1}.8805830$	$\bar{2}.9639256$
19	1.3474624	$\bar{1}.5462287$	$\bar{2}.1987663$	69	0.8991832	$\bar{1}.8859701$	$\bar{2}.9867869$
20	1.3436300	$\bar{1}.5532040$	$\bar{2}.2095740$	70	0.8813824	$\bar{1}.8911753$	$\bar{1}.0097929$
21	1.3399338	$\bar{1}.5597686$	$\bar{2}.2198348$	71	0.8632823	$\bar{1}.8961922$	$\bar{1}.0329099$
22	1.3361418	$\bar{1}.5663486$	$\bar{2}.2302068$	72	0.8449159	$\bar{1}.9010214$	$\bar{1}.0561055$
23	1.3322449	$\bar{1}.5729480$	$\bar{2}.2407031$	73	0.8263075	$\bar{1}.9056629$	$\bar{1}.0793554$
24	1.3282347	$\bar{1}.5795755$	$\bar{2}.2513408$	74	0.8074875	$\bar{1}.9101089$	$\bar{1}.1026214$
25	1.3241026	$\bar{1}.5862407$	$\bar{2}.2621381$	75	0.7884886	$\bar{1}.9143591$	$\bar{1}.1258705$
26	1.3198408	$\bar{1}.5929435$	$\bar{2}.2731027$	76	0.7693421	$\bar{1}.9184276$	$\bar{1}.1490855$
27	1.3154413	$\bar{1}.5996878$	$\bar{2}.2842465$	77	0.7500785	$\bar{1}.9222988$	$\bar{1}.1722203$
28	1.3108963	$\bar{1}.6064789$	$\bar{2}.2955826$	78	0.7307275	$\bar{1}.9259915$	$\bar{1}.1952640$
29	1.3061985	$\bar{1}.6133156$	$\bar{2}.3071171$	79	0.7113218	$\bar{1}.9295015$	$\bar{1}.2181797$
30	1.3013403	$\bar{1}.6201977$	$\bar{2}.3188574$	80	0.6918912	$\bar{1}.9328420$	$\bar{1}.2409508$
31	1.2963149	$\bar{1}.6271259$	$\bar{2}.3308110$	81	0.6724659	$\bar{1}.9360068$	$\bar{1}.2635409$
32	1.2911149	$\bar{1}.6340979$	$\bar{2}.3429830$	82	0.6530732	$\bar{1}.9389978$	$\bar{1}.2859246$
33	1.2857336	$\bar{1}.6411127$	$\bar{2}.3553791$	83	0.6337417	$\bar{1}.9418464$	$\bar{1}.3081047$
34	1.2801642	$\bar{1}.6481661$	$\bar{2}.3680019$	84	0.6144999	$\bar{1}.9445476$	$\bar{1}.3300477$
35	1.2743995	$\bar{1}.6552552$	$\bar{2}.3808557$	85	0.5953693	$\bar{1}.9470859$	$\bar{1}.3517166$
36	1.2684326	$\bar{1}.6623774$	$\bar{2}.3939448$	86	0.5763809	$\bar{1}.9494598$	$\bar{1}.3730789$
37	1.2622567	$\bar{1}.6695312$	$\bar{2}.4072745$	87	0.5575542	$\bar{1}.9517530$	$\bar{1}.3941988$
38	1.2558645	$\bar{1}.6767051$	$\bar{2}.4208406$	88	0.5389119	$\bar{1}.9538968$	$\bar{1}.4149849$
39	1.2492487	$\bar{1}.6839020$	$\bar{2}.4346533$	89	0.5204762	$\bar{1}.9559216$	$\bar{1}.4354454$
40	1.2424016	$\bar{1}.6911151$	$\bar{2}.4487135$	90	0.5022662	$\bar{1}.9577597$	$\bar{1}.4554935$
41	1.2353151	$\bar{1}.6983385$	$\bar{2}.4630234$	91	0.4842987	$\bar{1}.9595836$	$\bar{1}.4752849$
42	1.2279811	$\bar{1}.7055723$	$\bar{2}.4775912$	92	0.4665901	$\bar{1}.9612516$	$\bar{1}.4946615$
43	1.2203901	$\bar{1}.7128114$	$\bar{2}.4924213$	93	0.4491602	$\bar{1}.9628562$	$\bar{1}.5136960$
44	1.2125323	$\bar{1}.7200471$	$\bar{2}.5075148$	94	0.4320338	$\bar{1}.9643140$	$\bar{1}.5322802$
45	1.2043969	$\bar{1}.7272838$	$\bar{2}.5228869$	95	0.4152021	$\bar{1}.9658747$	$\bar{1}.5506726$
46	1.1959724	$\bar{1}.7345130$	$\bar{2}.5385406$	96	0.3986877	$\bar{1}.9666106$	$\bar{1}.5679229$
47	1.1872452	$\bar{1}.7417359$	$\bar{2}.5544907$	97	0.3824921	$\bar{1}.9679410$	$\bar{1}.5854489$
48	1.1782008	$\bar{1}.7489468$	$\bar{2}.5707460$	98	0.3666252	$\bar{1}.9684856$	$\bar{1}.6018604$
49	1.1688231	$\bar{1}.7561463$	$\bar{2}.5873232$	99	0.3510924	$\bar{1}.9696109$	$\bar{1}.6185185$
				100	0.3358698	$\bar{1}.9687906$	$\bar{1}.6329208$

YEARLY TABLE:—MALES. Interest 3 per Cent.

VALUES OF ANNUITIES. SINGLE and ANNUAL PREMIUMS, which insure £1 on the LIFE of a MALE.

Age	Present value of an Annuity of £1 (first payment at the age x).	Annuity (first payment at age x) which £1 will purchase.	Sum which One Premium of £1 will insure over One Year.	Sum which One Premium of £1 will insure over the Whole Term of Life.	Sum which an Annual Premium of £1 will insure over the Whole Term of Life.	Single Premium which will insure £1 over One Year.	Single Premium which will insure £1 over the Whole Term of Life.	Annual Premium which will insure £1 over the Whole Term of Life.
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$\frac{D_x}{C_x}$	$\frac{D_x}{M_x} = \Sigma_x$	$\frac{N_x}{M_x} = s_x$	$\frac{C_x}{D_x}$	$\frac{M_x}{D_x} = \Pi_x$	$\frac{M_x}{N_x} = \pi_x$
	£	£	£	£	£	£	£	£
0	19·1506	·052218	6·30	2·26135	43·3062	·158830	·44221	·023091
1	22·3518	·044739	16·02	2·86552	64·0494	·062425	·34898	·015613
2	23·5036	·042547	29·02	3·17027	74·5127	·034459	·31543	·013421
3	24·0316	·041612	43·19	3·33278	80·0920	·023155	·30005	·012486
4	24·3022	·041149	57·80	3·42267	83·1782	·017300	·29217	·012022
5	24·4367	·040922	75·79	3·46918	84·7752	·013194	·28825	·011796
6	24·4724	·040862	95·19	3·48172	85·2060	·010505	·28721	·011736
7	24·4410	·040915	112·45	3·47068	84·8270	·008893	·28813	·011789
8	24·3674	·041038	134·90	3·44506	83·9472	·007413	·29027	·011912
9	24·2536	·041231	159·33	3·40617	82·6120	·006276	·29358	·012105
10	24·1071	·041482	183·37	3·35736	80·9360	·005453	·29785	·012355
11	23·9347	·041780	203·59	3·30172	79·0256	·004912	·30287	·012654
12	23·7429	·042118	215·94	3·24191	76·9722	·004631	·30846	·012992
13	23·5374	·042486	218·71	3·18022	74·8541	·004572	·31444	·013359
14	23·3234	·042875	212·24	3·11839	72·7314	·004712	·32068	·013749
15	23·1052	·043280	199·11	3·05779	70·6510	·005022	·32703	·014154
16	22·8867	·043693	182·98	2·99944	68·6475	·005465	·33340	·014567
17	22·6710	·044109	166·10	2·94394	66·7421	·006021	·33968	·014983
18	22·4604	·044523	150·27	2·89172	64·9493	·006655	·34581	·015397
19	22·2568	·044930	136·26	2·84296	63·2752	·007339	·35175	·015804
20	22·0612	·045328	124·32	2·79767	61·7200	·008044	·35744	·016202
21	21·8743	·045716	121·66	2·75570	60·2789	·008220	·36288	·016590
22	21·6841	·046117	119·14	2·71426	58·8563	·008393	·36842	·016991
23	21·4904	·046532	116·79	2·67333	57·4509	·008562	·37407	·017406
24	21·2929	·046964	114·60	2·63284	56·0608	·008726	·37982	·017838
25	21·0913	·047413	112·45	2·59274	54·6842	·008893	·38569	·018287
26	20·8853	·047881	110·36	2·55303	53·3209	·009061	·39169	·018754
27	20·6748	·048368	108·34	2·51369	51·9701	·009230	·39782	·019242
28	20·4596	·048877	106·31	2·47469	50·6311	·009406	·40409	·019751
29	20·2394	·049408	104·28	2·43604	49·3041	·009590	·41050	·020282
30	20·0143	·049964	102·24	2·39774	47·9891	·009781	·41706	·020838
31	19·7840	·050546	100·16	2·35979	46·6862	·009984	·42377	·021420
32	19·5486	·051155	98·06	2·32221	45·3959	·010198	·43062	·022028
33	19·3078	·051792	95·90	2·28501	44·1185	·010428	·43764	·022666
34	19·0618	·052461	93·69	2·24819	42·8547	·010674	·44480	·023335
35	18·8105	·053162	91·43	2·21180	41·6049	·010937	·45212	·024036
36	18·5538	·053897	89·14	2·17582	40·3697	·011218	·45960	·024771
37	18·2918	·054669	86·74	2·14027	39·1494	·011528	·46723	·025543
38	18·0245	·055480	84·35	2·10521	37·9454	·011855	·47501	·026354
39	17·7521	·056331	81·91	2·07061	36·7576	·012209	·48295	·027205
40	17·4744	·057227	79·41	2·03650	35·5866	·012593	·49104	·028100
41	17·1916	·058168	76·92	2·00291	34·4331	·013001	·49927	·029042
42	16·9037	·059159	74·40	1·96983	33·2973	·013441	·50766	·030032
43	16·6108	·060202	71·84	1·93726	32·1795	·013920	·51619	·031076
44	16·3129	·061301	69·33	1·90525	31·0803	·014424	·52486	·032175
45	16·0102	·062460	66·80	1·87377	29·9994	·014970	·53368	·033334
46	15·7026	·063684	64·31	1·84284	28·9374	·015551	·54264	·034557
47	15·3902	·064976	61·82	1·81244	27·8939	·016175	·55174	·035850
48	15·0730	·066344	59·39	1·78260	26·8692	·016839	·56098	·037217
49	14·7511	·067792	57·00	1·75329	25·8629	·017545	·57036	·038665

YEARLY TABLE:—MALES. Interest 3 per Cent.

VALUES OF ANNUITIES. SINGLE and ANNUAL PREMIUMS, which insure £1 on the LIFE of a MALE.

Age	**Present value** of an **Annuity** of £1 (first payment at the age x).	**Annuity** (first payment at age x) which £1 will purchase.	Sum which **One Premium** of £1 will insure over **One Year.**	Sum which **One Premium** of £1 will insure over the **Whole Term of Life.**	Sum which an **Annual Premium** of £1 will insure over the **Whole Term of Life.**	**Single Premium** which will insure £1 over **One Year.**	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Annual Premium** which will insure £1 over the **Whole Term of Life.**
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$\frac{D_x}{C_x}$	$\frac{D_x}{M_x} = \Sigma_x$	$\frac{N_x}{M_x} = s_x$	$\frac{C_x}{D_x}$	$\frac{M_x}{D_x} = \Pi_x$	$\frac{M_x}{N_x} = \pi_x$
	£	£	£	£	£	£	£	£
50	14·4242	·069328	54·66	1·72451	24·8747	·018296	·57987	·040201
51	14·0925	·070960	50·95	1·69625	23·9045	·019628	·58954	·041833
52	13·7636	·072655	48·53	1·66912	22·9731	·020604	·59912	·043529
53	13·4315	·074452	46·27	1·64260	22·0627	·021613	·60879	·045325
54	13·0960	·076359	44·08	1·61665	21·1717	·022684	·61856	·047233
55	12·7570	·078388	41·96	1·59125	20·2995	·023834	·62844	·049262
56	12·4145	·080551	39·86	1·56638	19·4458	·025085	·63841	·051425
57	12·0687	·082859	37·78	1·54205	18·6106	·026467	·64849	·053733
58	11·7203	·085322	35·73	1·51830	17·7949	·027990	·65863	·056196
59	11·3697	·087953	33·68	1·49511	16·9990	·029689	·66885	·058827
60	11·0176	·090764	31·68	1·47255	16·2240	·031567	·67910	·061637
61	10·6650	·093765	29·70	1·45060	15·4706	·033668	·68937	·064639
62	10·3125	·096969	27·78	1·42932	14·7399	·035995	·69963	·067843
63	9·9612	·100390	25·93	1·40872	14·0325	·038571	·70986	·071263
64	9·6119	·104037	24·14	1·38881	13·3492	·041431	·72004	·074911
65	9·2657	·107925	22·44	1·36963	12·6906	·044572	·73012	·078799
66	8·9233	·112066	20·82	1·35117	12·0570	·048026	·74010	·082939
67	8·5858	·116472	19·30	1·33345	11·4487	·051818	·74993	·087346
68	8·2539	·121155	17·87	1·31649	10·8661	·055947	·75960	·092029
69	7·9284	·126130	16·54	1·30026	10·3089	·060443	·76908	·097003
70	7·6100	·131407	15·31	1·28477	9·7770	·065322	·77835	·102281
71	7·2993	·136999	14·17	1·27001	9·2702	·070589	·78739	·107872
72	6·9971	·142917	13·11	1·25597	8·7881	·076261	·79620	·113790
73	6·7036	·149174	12·14	1·24262	8·3300	·082368	·80475	·120048
74	6·4193	·155780	11·25	1·22996	7·8955	·088910	·81303	·126655
75	6·1445	·162746	10·43	1·21798	7·4839	·095874	·82103	·133620
76	5·8795	·170082	9·68	1·20663	7·0944	·103323	·82876	·140957
77	5·6244	·177796	8·99	1·19592	6·7264	·111205	·83618	·148669
78	5·3793	·185897	8·36	1·18579	6·3788	·119571	·84332	·156770
79	5·1442	·194392	7·79	1·17625	6·0509	·128395	·85016	·165265
80	4·9192	·203287	7·26	1·16723	5·7418	·137715	·85673	·174161
81	4·7040	·212586	6·78	1·15876	5·4508	·147518	·86299	·183460
82	4·4986	·222294	6·34	1·15081	5·1770	·157754	·86896	·193163
83	4·3027	·232412	5·94	1·14328	4·9192	·168488	·87467	·203285
84	4·1162	·242941	5·56	1·13619	4·6768	·179731	·88013	·213820
85	3·9388	·253881	5·22	1·12957	4·4492	·191452	·88529	·224759
86	3·7703	·265228	4·91	1·12341	4·2357	·203497	·89014	·236091
87	3·6104	·276978	4·63	1·11750	4·0346	·216137	·89486	·247856
88	3·4587	·289127	4·36	1·11200	3·8461	·229169	·89928	·260007
89	3·3149	·301664	4·12	1·10682	3·6691	·242731	·90349	·272550
90	3·1788	·314582	3·90	1·10215	3·5035	·256441	·90732	·285426
91	3·0500	·327870	3·69	1·09753	3·3475	·270796	·91114	·298734
92	2·9281	·341515	3·50	1·09332	3·2014	·285389	·91464	·312364
93	2·8129	·355500	3·33	1·08929	3·0641	·300452	·91803	·326359
94	2·7042	·369799	3·17	1·08564	2·9358	·315496	·92112	·340628
95	2·6014	·384413	3·01	1·08175	2·8140	·332313	·92443	·355363
96	2·5043	·399312	2·88	1·07991	2·7044	·346988	·92600	·369763
97	2·4126	·414484	2·75	1·07661	2·5975	·363877	·92884	·384989
98	2·3261	·429907	2·64	1·07526	2·5011	·378997	·93001	·399816
99	2·2444	·445561	2·51	1·07248	2·4070	·398269	·93242	·415450
100	2·1671	·461456	2·48	1·07451	2·3285	·404030	·93066	·429458

YEARLY TABLE:—MALES. Interest 3 per Cent.

A Table deduced from the **English Life Table, No. 3.,** for determining the **Value of Annuities, Assurances, &c.** on the whole of a stationary Population—or on the Part of the Population of the Age x and upwards.

Age (x)	$\frac{1}{100} \cdot v^x \cdot Q_x = Q'_x$	$\Sigma Q'_x = Z_x$	$\frac{Z_{x+1}}{Q'_x} = A'_x$	$\lambda\left(\frac{1}{100}Q_x\right) + \lambda v^x = \lambda Q'_x$	λZ_x	$\lambda Z_{x+1} - \lambda Q'_x = \lambda A'_x$	Age (x)
0	204,261	3,790,804	17·559	5·3101863	6·5787314	1·2444897	0
1	193,877	3,586,543	17·499	5·2875260	6·5546760	1·2430152	1
2	184,347	3,392,666	17·404	5·2656349	6·5305412	1·2406427	2
3	175,387	3,208,319	17·293	5·2439978	6·5062776	1·2378649	3
4	166,891	3,032,932	17·173	5·2224325	6·4818627	1·2348499	4
5	158,808	2,866,041	17·047	5·2008736	6·4572824	1·2316520	5
6	151,104	2,707,233	16·916	5·1792753	6·4325256	1·2283074	6
7	143,749	2,556,129	16·782	5·1576055	6·4075827	1·2248402	7
8	136,723	2,412,380	16·644	5·1358426	6·3824457	1·2212642	8
9	130,008	2,275,657	16·504	5·1139695	6·3571068	1·2175892	9
10	123,586	2,145,649	16·362	5·0919698	6·3315587	1·2138248	10
11	117,444	2,022,063	16·217	5·0698290	6·3057946	1·2099792	11
12	111,567	1,904,619	16·072	5·0475359	6·2798082	1·2060570	12
13	105,945	1,793,052	15·924	5·0250800	6·2535929	1·2020626	13
14	100,566	1,687,107	15·776	5·0024530	6·2271426	1·1979983	14
15	95,422	1,586,541	15·627	4·9796483	6·2004513	1·1938640	15
16	90.503	1,491,119	15·476	4·9566610	6·1735123	1·1896581	16
17	85,800	1,400,616	15·324	4·9334878	6·1463191	1·1853772	17
18	81,307	1,314,816	15·171	4·9101257	6·1188650	1·1810167	18
19	77,015	1,233,509	15·017	4·8865731	6·0911424	1·1765703	19
20	72,917	1,156,494	14·860	4·8628301	6·0631434	1·1720297	20
21	69,008	1,083,577	14·702	4·8388964	6·0348598	1·1673853	21
22	65,278	1,014,569	14·542	4·8147684	6·0062817	1·1626310	22
23	61,722	949,291	14·380	4·7904392	5·9773994	1·1577629	23
24	58,331	887,569	14·216	4·7659024	5·9482021	1·1527768	24
25	55,100	829,238	14·050	4·7411502	5·9186792	1·1476682	25
26	52,021	774.138	13·881	4·7161747	5·8888184	1·1424329	26
27	49,087	722,117	13·711	4·6909668	5·8586076	1·1370676	27
28	46,293	673,030	13·538	4·6655186	5·8280344	1·1315667	28
29	43,633	626,737	13·364	4·6398193	5·7970853	1·1259267	29
30	41,102	583,104	13·187	4·6138589	5·7657460	1·1201420	30
31	38,693	542,002	13·008	4·5876268	5·7340009	1·1142079	31
32	36,401	503,309	12·827	4·5611114	5·7018347	1·1081199	32
33	34,222	466,908	12·644	4·5343002	5·6692313	1·1018727	33
34	32,150	432,686	12·458	4·5071803	5·6361729	1·0954613	34
35	30,181	400.536	12·271	4·4797379	5·6026416	1·0888803	35
36	28,311	370,355	12·082	4·4519582	5·5686182	1·0821238	36
37	26,535	342,044	11·890	4·4238257	5·5340820	1·0751860	37
38	24,850	315,509	11·697	4·3953239	5·4990117	1·0680599	38
39	23,251	290,659	11·501	4·3664353	5·4633838	1·0607391	39
40	21,734	267,408	11·304	4·3371409	5·4271744	1·0532183	40
41	20,296	245,674	11·104	4·3074210	5·3903592	1·0454905	41
42	18,935	225,378	10·903	4·2772544	5·3529115	1·0375458	42
43	17,645	206,443	10·700	4·2466181	5·3148002	1·0293793	43
44	16,424	188,798	10·495	4·2154881	5·2759974	1·0209837	44
45	15,270	172,374	10·288	4·1838385	5·2364718	1·0123487	45
46	14,179	157,104	10·080	4·1516413	5·1961872	1·0034669	46
47	13,148	142,925	9·870	4·1188662	5·1551082	0·9943316	47
48	12,175	129,777	9·659	4·0854813	5·1131978	0·9849334	48
49	11,258	117,602	9·446	4·0514514	5·0704147	0·9752617	49
50	10,393	106,344	9·232	4·0167386	5·0267131	0·9653109	50
51	9,579	95,951	9·017	3·9813013	4·9820495	0·9550717	51
52	8,813	86.372	8·801	3·9451010	4·9363730	0·9445312	52
53	8,093	77,559	8·584	3·9080981	4·8896322	0·9336742	53
54	7,417	69,466	8·365	3·8702436	4·8417723	0·9224912	54

YEARLY TABLE:—MALES. Interest 3 per Cent.

A Table deduced from the **English Life Table, No. 3.**, for determining the **Value of Annuities, Assurances, &c.** on the whole of a stationary Population—or on the Part of the Population of the Age x and upwards.

Age (x)	$\frac{1}{100}\cdot v^x . Q_x = Q'_x$	$\Sigma Q'_x = Z_x$	$\frac{Z_{+1}}{Q'_x} = A'_x$	$\lambda\left(\frac{1}{100} Q_x\right) + \lambda v^x = \lambda Q'_x$	λZ_x	$\lambda Z_{x+1} - \lambda Q'_x = \lambda A'_x$	Age (x)
55	6,784	62,049	8·146	3·8314831	4·7927348	0·9109671	55
56	6,191	55,265	7·927	3·7917574	4·7424502	0·8990941	56
57	5,636	49,074	7·707	3·7510021	4·6908515	0·8868677	57
58	5,119	43,438	7·486	3·7091466	4·6378698	0·8742676	58
59	4,636	38,319	7·266	3·6661148	4·5834142	0·8612960	59
60	4,186	33,683	7·046	3·6218249	4·5274108	0·8479529	60
61	3,769	29,497	6·827	3·5761883	4·4697778	0·8342177	61
62	3,382	25,728	6·608	3·5291100	4·4104060	0·8200898	62
63	3,023	22,346	6·391	3·4804880	4·3491998	0·8055866	63
64	2,693	19,323	6·176	3·4302134	4·2860746	0·7906788	64
65	2,389	16,630	5·962	3·3781699	4·2208922	0·7753706	65
66	2,110	14,241	5·750	3·3242327	4·1535405	0·7596639	66
67	1,855	12,131	5·541	3·2682700	4·0838966	0·7435541	67
68	1,622	10,276	5·334	3·2101411	4·0118241	0·7270758	68
69	1,412	8,654	5·131	3·1496969	3·9372169	0·7101616	69
70	1,221	7,242	4·930	3·0867795	3·8598585	0·6928891	70
71	1,050	6,021	4·734	3·0212210	3·7796686	0·6752228	71
72	897	4,971	4·541	2·9528451	3·6964438	0·6571759	72
73	761	4,074	4·353	2·8814648	3·6100210	0·6387566	73
74	641	3,313	4·168	2·8068838	3·5202214	0·6199527	74
75	536	2,672	3·988	2·7288951	3·4268365	0·6007061	75
76	444	2,136	3·812	2·6472819	3·3296012	0·5811185	76
77	365	1,692	3·640	2·5618159	3·2284004	0·5610550	77
78	297	1,327	3·472	2·4722580	3·1228709	0·5405792	78
79	239	1,030	3·310	2·3783592	3·0128372	0·5198173	79
80	190	791	3·155	2·2798586	2·8981765	0·4990159	80
81	150	601	3·004	2·1764827	2·7788745	0·4776938	81
82	117	451	2·856	2·0679478	2·6541765	0·4557987	82
83	90	334	2·713	1·9539589	2·5237465	0·4334309	83
84	68	244	2·578	1·8342087	2·3873898	0·4113040	84
85	51	176	2·446	1·7083832	2·2455127	0·3885268	85
86	38	125	2·309	1·5761438	2·0969100	0·3633755	86
87	27	87	2·193	1·4371537	1·9395193	0·3409976	87
88	20	60	2·046	1·2910554	1·7781513	0·3110046	88
89	14	40	1·894	1·1374960	1·6020600	0·2774773	89
90	9	26	1·796	0·9760760	1·4149733	0·2543729	90
91	6	17	1·718	0·8064164	1·2304489	0·2349763	91
92	4	11	1·648	0·6281308	1·0413927	0·2169672	92
93	3	7	1·450	0·4408169	0·8450980	0·1612431	93
94	2	4	1·140	0·2440118	0·6020600	0·0570182	94
95	1	2	·918	0·0371814	0·3010300	$\bar{1}$·9628186	95
96	1	1	...	$\bar{1}$·8199355	0·0000000	...	96
97	...	...	...	$\bar{1}$·5917459	...	...	97
98	...	...	...	$\bar{1}$·3526122	...	...	98
99	...	...	...	$\bar{1}$·1020268	...	...	99
100	...	...	...	$\bar{2}$·8401291	...	...	100

Note.—The first and second columns in this Table correspond in the nature of their construction and relations with the columns D and N in the previous Tables for calculating Life Annuities. The numbers in the first column are obtained by multiplying the numbers in the column Q of the Life Table by the successive powers of $v = \frac{1}{1\cdot03}$ (when the interest of money is 3 per cent.), and dividing by 100. The division by 100 is equivalent to cutting off 2 figures, which is done merely for the sake of convenience, as the Table in its present form is sufficiently extensive for all the purposes to which it can be applied. The v varies with the interest of money.

YEARLY TABLE:—MALES. Interest $3\frac{1}{4}$ per Cent.

Age (x)	D_x	N_x	λN_x	**Age** (x)	D_x	N_x	λN_x
0	511,745	9,344,096	6·9705373	55	36,084	450,680	5·6538683
1	414,553	8,832,351	6·9460764	56	34,090	414,596	5·6176251
2	375,688	8,417,798	6·9251985	57	32,164	380,506	5·5803615
3	350,948	8,042,110	6·9053700	58	30,302	348,342	5·5420058
4	331,795	7,691,162	6·8859920	59	28,502	318,040	5·5024817
5	315,625	7,359,367	6·8668404	60	26,761	289,538	5·4617056
6	301,535	7,043,742	6·8478034	61	25,076	262,777	5·4195874
7	288,884	6,742,207	6·8288021	62	23,444	237,701	5·3760310
8	277,228	6,453,323	6·8097834	63	21,865	214,257	5·3309350
9	266,452	6,176,095	6·7907140	64	20,335	192,392	5·2841870
10	256,397	5,909,643	6·7715612	65	18,855	172,057	5·2356723
11	246,931	5,653,246	6·7522979	66	17,423	153,202	5·1852645
12	237,948	5,406,315	6·7329013	67	16,040	135,779	5·1328326
13	229,360	5,168,367	6·7133533	68	14,706	119,739	5·0782357
14	221,094	4,939,007	6·6936396	69	13,422	105,033	5·0213258
15	213,095	4,717,913	6·6737499	70	12,190	91,611	4·9619476
16	205,320	4,504,818	6·6536773	71	11,012	79,421	4·8999354
17	197,738	4,299,498	6·6334178	72	9,890·0	68,408·7	4·8351113
18	190,326	4,101,760	6·6129703	73	8,826·2	58,518·7	4·7672947
19	183,071	3,911,434	6·5923359	74	7,823·2	49,692·5	4·6962909
20	175,968	3,728,363	6·5715183	75	6,883·1	41,869·3	4·6218957
21	169,018	3,552,395	6·5505213	76	6,008·1	34,986·2	4·5438968
22	162,311	3,383,377	6·5293504	77	5,199·7	28,978·1	4·4620699
23	155,843	3,221,066	6·5079996	78	4,459·2	23,778·4	4·3761826
24	149,607	3,065,223	6·4864620	79	3,787·0	19,319·2	4·2859891
25	143,595	2,915,616	6·4647303	80	3,182·7	15,532·2	4·1912330
26	137,801	2,772,021	6·4427965	81	2,645·3	12,349·5	4·0916495
27	132,218	2,634,220	6·4206520	82	2,172·8	9,704·2	3·9869597
28	126,839	2,502,002	6·3982877	83	1,762·4	7,531·4	3·8768757
29	121,656	2,375,163	6·3756935	84	1,410·7	5,769·0	3·7611005
30	116,663	2,253,507	6·3528589	85	1,113·3	4,358·3	3·6393171
31	111,853	2,136,844	6·3297728	86	865·72	3,245·01	3·5112160
32	107,218	2,024,991	6·3064231	87	662·68	2,379·29	3·3764474
33	102,752	1,917,773	6·2827972	88	498·93	1,716·61	3·2346716
34	98,449	1,815,021	6·2588816	89	369·16	1,217·68	3·0855332
35	94,302	1,716,572	6·2346620	90	268·19	848·52	2·9286621
36	90,305	1,622,270	6·2101232	91	191·12	580·33	2·7636750
37	86,451	1,531,965	6·1852488	92	133·48	389·21	2·5901840
38	82,736	1,445,514	6·1600223	93	91·272	255·728	2·4077783
39	79,153	1,362,778	6·1344251	94	61·045	164·456	2·2160497
40	75,698	1,283,625	6·1084382	95	39·894	103·411	2·0145667
41	72,364	1,207,927	6·0820407	96	25·448	63·517	1·8028900
42	69,148	1,135,563	6·0552113	97	15·829	38·069	1·5805715
43	66,044	1,066,415	6·0279263	98	9·5896	22·2401	1·3471368
44	63,048	1,000,371	6·0001610	99	5·6524	12·6505	1·1021077
45	60,156	937,323	5·9718893	100	3·2379	6·9981	0·8449801
46	57,364	877,167	5·9430823	101	1·8004	3·7602	0·5752109
47	54,669	819,803	5·9137095	102	·9706	1·9598	0·2922118
48	52,066	765,134	5·8837375	103	·5067	·9892	$\bar{1}$·9952841
49	49,553	713,068	5·8531310	104	·2559	·4825	$\bar{1}$·6834973
50	47,126	663,515	5·8218508	105	·1248	·2266	$\bar{1}$·3552599
51	44,782	616,389	5·7898549	106	·0587	·1018	$\bar{1}$·0077478
52	42,495	571,607	5·7570975	107	·0266	·0431	$\bar{2}$·6344773
53	40,284	529,112	5·7235476	108	·0116	·0165	$\bar{2}$·2174839
54	38,148	488,828	5·6891561	109	·0049	·0049	$\bar{3}$·6901961

YEARLY TABLE:—MALES. Interest 3½ per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	511,745	9,200,561	6·9638143	55	34,518	428,119	5·6315645
1	414,219	8,688,816	6·9389606	56	32,584	393,601	5·5950562
2	375,083	8,274,597	6·9177469	57	30,718	361,017	5·5575277
3	350,100	7,899,514	6·8976004	58	28,917	330,299	5·5189073
4	330,726	7,549,414	6·8779132	59	27,177	301,382	5·4791173
5	314,354	7,218,688	6·8584583	60	25,496	274,205	5·4380754
6	300,079	6,904,334	6·8391219	61	23,872	248,709	5·3956915
7	287,257	6,604,255	6·8198238	62	22,301	224,837	5·3518678
8	275,445	6,316,998	6·8005108	63	20,781	202,536	5·3065022
9	264,524	6,041,553	6·7811486	64	19,312	181,755	5·2594864
10	254,336	5,777,029	6·7617046	65	17,891	162,443	5·2107010
11	244,750	5,522,693	6·7421509	66	16,519	144,552	5·1600241
12	235,656	5,277,943	6·7224648	67	15,195	128,033	5·1073219
13	226,967	5,042,287	6·7026276	68	13,920	112,838	5·0524554
14	218,611	4,815,320	6·6826251	69	12,695	98,918	4·9952753
15	210,532	4,596,709	6·6624471	70	11,521	86,223	4·9356231
16	202,687	4,386,177	6·6420861	71	10,399	74,702	4·8733322
17	195,044	4,183,490	6·6215388	72	9,331·9	64,302·8	4·8082299
18	187,582	3,988,446	6·6008038	73	8,321·4	54,970·9	4·7401328
19	180,286	3,800,864	6·5798823	74	7,369·8	46,649·5	4·6688470
20	173,152	3,620,578	6·5587779	75	6,479·0	39,279·7	4·5941682
21	166,178	3,447,426	6·5374950	76	5,650·7	32,800·7	4·5158831
22	159,456	3,281,248	6·5160391	77	4,886·5	27,150·0	4·4337698
23	152,978	3,121,792	6·4944040	78	4,187·3	22,263·5	4·3475935
24	146,738	2,968,814	6·4725830	79	3,553·1	18,076·2	4·2571071
25	140,728	2,822,076	6·4505687	80	2,983·8	14,523·1	4·1620593
26	134,941	2,681,348	6·4283532	81	2,477·9	11,539·3	4·0621795
27	129,369	2,546,407	6·4059278	82	2,033·7	9,061·4	3·9571953
28	124,006	2,417,038	6·3832835	83	1,648·3	7,027·7	3·8468132
29	118,843	2,293,032	6·3604102	84	1,318·2	5,379·4	3·7307338
30	113,873	2,174,189	6·3372973	85	1,039·6	4,061·2	3·6086544
31	109,090	2,060,316	6·3139339	86	807·69	3,021·64	3·4802427
32	104,485	1,951,226	6·2903075	87	617·76	2,213·95	3·3451678
33	100,053	1,846,741	6·2664059	88	464·74	1,596·19	3·2030846
34	95,785	1,746,688	6·2422153	89	343·59	1,131·45	3·0536355
35	91,676	1,650,903	6·2177216	90	249·41	787·86	2·8964491
36	87,720	1,559,227	6·1929094	91	177·59	538·45	2·7311454
37	83,909	1,471,507	6·1677624	92	123·93	360·86	2·5573387
38	80,238	1,387,598	6·1422637	93	84·674	236·928	2·3746164
39	76,702	1,307,360	6·1163952	94	56·586	152·254	2·1825687
40	73,294	1,230,658	6·0901374	95	36·950	95·668	1·9807667
41	70,010	1,157,364	6·0634700	96	23·552	58·718	1·7687713
42	66,844	1,087,354	6·0363710	97	14·637	35·166	1·5461230
43	63,792	1,020,510	6·0088173	98	8·8606	20·5293	1·3123741
44	60,849	956,718	5·9807840	99	5·2185	11·6687	1·0670225
45	58,012	895,869	5·9522445	100	2·9869	6·4502	0·8095732
46	55,275	837,857	5·9231699	101	1·6595	3·4633	0·5394901
47	52,635	782,582	5·8935298	102	·8940	1·8038	0·2561884
48	50,088	729,947	5·8632913	103	·4663	·9098	$\bar{1}$·9589459
49	47,632	679,859	5·8324189	104	·2353	·4435	$\bar{1}$·6468936
50	45,262	632,227	5·8008730	105	·1147	·2082	$\bar{1}$·3184807
51	42,977	586,965	5·7686122	106	·0539	·0935	$\bar{2}$·9708116
52	40,750	543,988	5·7355893	107	·0244	·0396	$\bar{2}$·5976952
53	38,598	503,238	5·7017735	108	·0107	·0152	$\bar{2}$·1818436
54	36,521	464,640	5·6671166	109	·0045	·0045	$\bar{3}$·6532125

YEARLY TABLE:—MALES. Interest $3\frac{1}{2}$ per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	511,745	8,925,340	6·9506248	55	31,590	386,422	5·5870618
1	413,552	8,413,595	6·9249817	56	29,772	354,832	5·5500228
2	373,876	8,000,043	6·9030924	57	28,022	325,060	5·5119635
3	348,411	7,626,167	6·8823063	58	26,336	297,038	5·4728120
4	328,601	7,277,756	6·8619975	59	24,712	270,702	5·4324915
5	311,831	6,949,155	6·8419320	60	23,147	245,990	5·3909175
6	297,192	6,637,324	6·8219930	61	21,637	222,843	5·3479990
7	284,035	6,340,132	6·8020983	62	20,180	201,206	5·3036410
8	271,916	6,056,097	6·7821928	63	18,775	181,026	5·2577410
9	260,715	5,784,181	6·7622419	64	17,419	162,251	5·2101874
10	250,270	5,523,466	6·7422117	65	16,112	144,832	5·1608645
11	240,449	5,273,196	6·7220739	66	14,852	128,720	5·1096460
12	231,142	5,032,747	6·7018051	67	13,640	113,868	5·0564017
13	222,261	4,801,605	6·6813865	68	12,476	100,228	5·0009890
14	213,733	4,579,344	6·6608033	69	11,359	87,752	4·9432570
15	205,503	4,365,611	6·6400450	70	10,292	76,393	4·8830536
16	197,527	4,160,108	6·6191046	71	9,274·7	66,100·7	4·8202061
17	189,773	3,962,581	6·5979781	72	8,309·5	56,826·0	4·7545471
18	182,218	3,772,808	6·5766647	73	7,397·8	48,516·5	4·6858895
19	174,850	3,590,590	6·5551658	74	6,541·3	41,118·7	4·6140394
20	167,660	3,415,740	6·5334848	75	5,741·3	34,577·4	4·5387923
21	160,648	3,248,080	6·5116267	76	4,999·3	28,836·1	4·4599365
22	153,902	3,087,432	6·4895974	77	4,316·3	23,836·8	4·3772480
23	147,412	2,933,530	6·4673905	78	3,692·6	19,520·5	4·2904910
24	141,171	2,786,118	6·4449996	79	3,128·4	15,827·9	4·1994233
25	135,171	2,644,947	6·4224171	80	2,622·8	12,699·5	4·1037866
26	129,404	2,509,776	6·3996349	81	2,174·7	10,076·7	4·0033184
27	123,861	2,380,372	6·3766448	82	1,781.9	7,902·0	3·8977370
28	118,535	2,256,511	6·3534374	83	1,441·9	6,120·1	3·7867585
29	113,417	2,137,976	6·3300028	84	1,151·3	4,678·2	3·6700788
30	108,499	2,024,559	6·3063304	85	906·48	3,526·92	3·5473956
31	103,774	1,916,060	6·2824091	86	703·16	2,620·44	3·4183742
32	99,233	1,812,286	6·2582267	87	536·94	1,917·28	3·2826856
33	94,871	1,713,053	6·2337709	88	403·29	1,380·34	3·1399861
34	90,678	1,618,182	6·2090273	89	297.68	977·05	2·9899168
35	86,648	1,527,504	6·1839823	90	215·73	679·37	2·8321064
36	82,775	1,440,856	6·1586206	91	153·37	463·64	2·6661809
37	79,052	1,358,081	6·1329256	92	106·85	310·27	2·4917398
38	75,472	1,279,029	6·1068804	93	72·889	203·416	2·3083851
39	72,029	1,203,557	6·0804667	94	48·632	130·527	2·1157003
40	68,718	1,131,528	6·0536654	95	31·705	81·895	1·9132574
41	65,533	1,062,810	6·0264556	96	20·176	50·190	1·7006172
42	62,469	997,277	5·9988158	97	12·519	30·014	1·4773239
43	59,521	934,808	5·9707224	98	7·5661	17·4954	1·2429239
44	56,684	875,287	5·9421505	99	4·4489	9·9293	0·9969186
45	53,953	818,603	5·9130733	100	2·5423	5·4804	0·7388123
46	51,325	764,650	5·8834627	101	1·4102	2·9381	0·4680666
47	48,795	713,325	5·8532875	102	·7584	1·5279	0·1840949
48	46,360	664,530	5·8225146	103	·3950	·7695	$\bar{1}$·8862086
49	44,015	618,170	5·7911079	104	·1990	·3745	$\bar{1}$·5734518
50	41,758	574,155	5·7590292	105	·0968	·1755	$\bar{1}$·2442771
51	39,586	532,397	5·7262356	106	·0455	·0787	$\bar{2}$·8959747
52	37,474	492,811	5·6926804	107	·0206	·0332	$\bar{2}$·5211381
53	35,438	455,337	5·6583330	108	·0089	·0126	$\bar{2}$·1003705
54	33,477	419,899	5·6231449	109	·0037	·0037	$\bar{3}$·5682017

YEARLY TABLE:—MALES. Interest $3\frac{3}{4}$ per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	511,745	8,540,061	6·9314611	55	27,664	331,546	5·5205438
1	412,555	8,028,316	6·9046244	56	26,010	303,882	5·4827050
2	372,076	7,615,761	6·8817133	57	24,422	277,872	5·4438448
3	345,899	7,243,685	6·8599596	58	22,897	253,450	5·4038923
4	325,445	6,897,786	6·8387097	59	21,434	230,553	5·3627708
5	308,092	6,572,341	6·8177201	60	20,027	209,119	5·3203935
6	292,921	6,264,249	6·7968690	61	18,676	189,092	5·2766732
7	279,278	5,971,328	6·7760710	62	17,376	170,416	5·2315104
8	266,719	5,692,050	6·7552687	63	16,127	153,040	5·1848050
9	255,115	5,425,331	6·7344263	64	14,927	136,913	5·1364447
10	244,305	5,170,216	6·7135086	65	13,773	121,986	5·0863100
11	234,152	4,925,911	6·6924866	66	12,666	108,213	5·0342794
12	224,547	4,691,759	6·6713357	67	11,604	95,547	4·9802171
13	215,398	4,467,212	6·6500366	68	10,588	83,943	4·9239845
14	206,635	4,251,814	6·6285742	69	9,617·2	73,355·1	4·8654303
15	198,200	4,045,179	6·6069378	70	8,692·5	63,737·9	4·8043977
16	190,048	3,846,979	6·5851198	71	7,814·6	55,045·4	4·7407211
17	182,147	3,656,931	6·5631168	72	6,984·5	47,230·8	4·6742253
18	174,475	3,474,784	6·5409278	73	6,203·2	40,246·3	4·6047259
19	167,016	3,300,309	6·5185546	74	5,471·8	34,043·1	4·5320291
20	159,762	3,133,293	6·4960010	75	4,791·0	28,571·3	4·4559300
21	152,712	2,973,531	6·4732725	76	4,161·8	23,780·3	4·3762174
22	145,946	2,820,819	6·4503752	77	3,584·5	19,618·5	4·2926658
23	139,455	2,674,873	6·4273032	78	3,059·2	16,034·0	4·2050419
24	133,229	2,535,418	6·4040496	79	2,585·5	12,974·8	4·1131007
25	127,259	2,402,189	6·3806072	80	2,162·5	10,389·3	4·0165863
26	121,536	2,274,930	6·3569680	81	1,788·7	8,226·8	3·9152309
27	116,050	2,153,394	6·3331235	82	1,462·1	6,438·1	3·8087577
28	110,792	2,037,344	6·3090644	83	1,180·2	4,976·0	3·6968804
29	105,753	1,926,552	6·2847808	84	940·14	3,795·81	3·5793045
30	100,924	1,820,799	6·2602619	85	738·41	2,855·67	3·4557080
31	96,296	1,719,875	6·2354969	86	571·41	2,117·26	3·3257742
32	91,861	1,623,579	6·2104734	87	435·29	1,545·85	3·1891674
33	87,610	1,531,718	6·1851788	88	326·15	1,110·56	3·0455421
34	83,537	1,444,108	6·1595997	89	240·16	784·41	2·8945431
35	79,632	1,360,571	6·1337212	90	173·63	544·25	2·7357984
36	75,889	1,280,939	6·1075285	91	123·14	370·62	2·5689289
37	72,301	1,205,050	6·0810051	92	85·584	247·482	2·3935436
38	68,860	1,132,749	6·0541337	93	58·240	161·898	2·2092414
39	65,561	1,063,889	6·0268964	94	38·764	103·658	2·0156028
40	62,397	998,328	5·9992732	95	25·211	64·894	1·8122045
41	59,361	935,931	5·9712439	96	16·005	39·683	1·5986045
42	56,450	876,570	5·9427866	97	9·9069	23·6782	1·3743487
43	53,656	820,120	5·9138774	98	5·9730	13·7713	1·1389750
44	50,975	766,464	5·8844918	99	3·5037	7·7983	0·8919999
45	48,403	715,489	5·8546030	100	1·9973	4·2946	0·6329227
46	45,934	667,086	5·8241818	101	1·1053	2·2973	0·3612177
47	43,564	621,152	5·7931979	102	·5930	1·1920	0·0762763
48	41,290	577,588	5·7616182	103	·3081	·5990	$\bar{1}$·7774268
49	39,108	536,298	5·7294062	104	·1548	·2909	$\bar{1}$·4637437
50	37,013	497,190	5·6965224	105	·0752	·1361	$\bar{1}$·1338581
51	35,003	460,177	5·6629249	106	·0352	·0609	$\bar{2}$·7846173
52	33,055	425,174	5·6285667	107	·0159	·0257	$\bar{2}$·4099331
53	31,185	392,119	5·5934179	108	·0069	·0098	$\bar{3}$·9912261
54	29,388	360,934	5·5574278	109	·0029	·0029	$\bar{3}$·4623980

YEARLY TABLE:—MALES. Interest 4 per Cent.

Age (x)	D_x	N_x	S_x	C_x	M_x	R_x	Age (x)
0	511,745	8,184,833	150,139,344	80.499·04	196,943·65	2,410,246·79	0
1	411,563	7,673,088	141,954,511	25,444·71	116,444·61	2,213,303·14	1
2	370,289	7,261,525	134,281,423	12,637·08	90,999·90	2,096,858·53	2
3	343,410	6,891,236	127,019,898	7,875·31	78,362·82	2,005,858·63	3
4	322,327	6,547,826	120,128,662	5,522·53	70,487·51	1,927,495·81	4
5	304,407	6,225,499	113,580,836	3,977·65	64,964·98	1,857,008·30	5
6	288,721	5,921,092	107,355,337	3,003·95	60,987·33	1,792,043·32	6
7	274,613	5,632,371	101.434,245	2,418·59	57,983·38	1,731,055·99	7
8	261,632	5,357,758	95,801,874	1,920·87	55,564·79	1,673,072·61	8
9	249,649	5,096,126	90,444,116	1,551·77	53,643·92	1,617,507·82	9
10	238,495	4,846,477	85,347,990	1,288·12	52,092·15	1,563,863·90	10
11	228,034	4,607,982	80,501,513	1,109·28	50,804·03	1,511,771·75	11
12	218,154	4,379,948	75,893,531	1,000·56	49,694·75	1,460,967·72	12
13	208,763	4,161,794	71,513,583	945·33	48,694·19	1,411,272·97	13
14	199,789	3,953,031	67,351,789	932·29	47,748·86	1,362,578·78	14
15	191,172	3,753,242	63,398,758	950·89	46,816·57	1,314,829·92	15
16	182,869	3,562,070	59,645,516	989·78	45,865·68	1,268,013·35	16
17	174,845	3,379,201	56,083,446	1,042·54	44,875·90	1,222,147·67	17
18	167,078	3,204,356	52,704,245	1,101·17	43,833·36	1,177,271·77	18
19	159,550	3,037,278	49,499,889	1,159·68	42,732·19	1,133,438·41	19
20	152,254	2,877,728	46,462,611	1,212·94	41,572·51	1,090,706·22	20
21	145,186	2,725,474	43,584,883	1,181·90	40,359·57	1,049,133·71	21
22	138,419	2,580,288	40,859,409	1,150·64	39,177·67	1,008,774·14	22
23	131,945	2,441,869	38,279,121	1,118·87	38,027·03	969,596·47	23
24	125,751	2,309,924	35,837,252	1,086·71	36,908·16	931,569·44	24
25	119,828	2,184,173	33,527,328	1,055·38	35,821·45	894,661·28	25
26	114,164	2,064,345	31,343,155	1,024·50	34,766·07	858,839·83	26
27	108,749	1,950,181	29,278,810	994·10	33,741·57	824,073·76	27
28	103.572	1,841,432	27,328,629	964·84	32,747·47	790,332·19	28
29	98,623	1,737,860	25,487,197	936·67	31,782·63	757,584·72	29
30	93,894	1,639,237	23,749,337	909·54	30,845·96	725,802·09	30
31	89,373	1,545,343	22,110,100	883·68	29,936·42	694,956·13	31
32	85,052	1,455,970	20,564,757	859·01	29,052·74	665,019·71	32
33	80,921	1,370,918	19,108,787	835·72	28,193·73	635,966·97	33
34	76,973	1,289,997	17,737,869	813·72	27,358·01	607,773·24	34
35	73,199	1,213,024	16,447,872	792·90	26,544·29	580,415·23	35
36	69,591	1,139,825	15,234,848	773·18	25,751·39	553,870·94	36
37	66,141	1,070,234	14,095,023	755·16	24,978·21	528,119·55	37
38	62,842	1,004,093	13,024,789	737·81	24,223·05	503,141·34	38
39	59,687	941,251	12,020,696	721·72	23,485·24	478,918·29	39
40	56,670	881,564	11,079.445	706·78	22,763·52	455,433·05	40
41	53,784	824,894	10,197,881	692·50	22,056·74	432,669·53	41
42	51,022	771,110	9.372,987	679·20	21,364·24	410,612·79	42
43	48,381	720,088	8,601,877	666·96	20,685·04	389,248·55	43
44	45,853	671,707	7,881,789	655·01	20,018·08	368,563·51	44
45	43,434	625,854	7,210,082	643·97	19,363·07	348,545·43	45
46	41,120	582,420	6,584,228	633·29	18,719·10	329,182·36	46
47	38,905	541,300	6,001,808	623·24	18,085·81	310,463·26	47
48	36,785	502.395	5,460,508	613·46	17,462·57	292,377·45	48
49	34,757	465,610	4,958,113	603·94	16,849·11	274,914·88	49
50	32,816	430,853	4,492.503	594·65	16,245·17	258,065·77	50
51	30,960	398,037	4,061,650	601·83	15,650·52	241,820·60	51
52	29,167	367,077	3,663,613	595·19	15,048·69	226,170·08	52
53	27,450	337,910	3,296,536	587·58	14,453·50	211,121·39	53
54	25,807	310,460	2,958,626	579·78	13,865·92	196,667·89	54

YEARLY TABLE:—MALES. Interest 4 per Cent.

Age (x)	D_x	N_x	S_x	C_x	M_x	R_x	Age (x)
55	24,234	284,653	2,648,166	572·05	13,286·14	182,801·97	55
56	22,730	260,419	2,363,513	564·70	12,714·09	169,515·83	56
57	21,291	237,689	2,103,094	558·09	12,149·39	156,801·74	57
58	19,914	216,398	1,865,405	552·05	11,591·30	144,652·35	58
59	18,596	196,484	1,649,007	546·79	11,039·25	133,061·05	59
60	17,334	177,888	1,452,523	541·94	10,492·46	122,021·80	60
61	16,126	160,554	1,274,635	537·70	9,950·52	111,529·34	61
62	14,968	144,428	1,114,081	533·59	9,412·82	101,578·82	62
63	13,858	129,460	969,653	529·40	8,879·23	92,166·00	63
64	12,796	115,602	840,193	525·05	8,349·83	83,286·77	64
65	11,779	102,806	724,591	519·96	7,824·78	74,936·94	65
66	10,806	91,027	621,785	513·97	7,304·82	67,112·16	66
67	9,876·2	80,220·7	530,757·5	506·85	6,790·85	59,807·34	67
68	8,989·5	70,344·5	450,536·8	498·11	6,284·00	53,016·49	68
69	8,145·7	61,355·0	380,192·3	487·62	5,785·89	46,732·49	69
70	7,344·8	53,209·3	318,837·3	475·16	5,298·27	40,946·60	70
71	6,587·1	45,864·5	265,628·0	460·51	4,823·11	35,648·33	71
72	5,873·3	39,277·4	219,763·5	443·60	4,362·60	30,825·22	72
73	5,203·7	33,404·1	180,486·1	424·50	3,919·00	26,462·62	73
74	4,579·1	28,200·4	147,082·0	403·21	3,494·50	22,543·62	74
75	3,999·8	23,621·3	118,881·6	379·79	3,091·29	19,049·12	75
76	3,466·1	19,621·5	95,260·3	354·69	2,711·50	15,957·83	76
77	2,978·2	16,155·4	75,638·8	328·00	2,356·81	13,246·33	77
78	2,535·6	13,177·2	59,483·4	300·27	2,028·81	10,889·52	78
79	2,137·8	10,641·6	46,306·2	271·85	1,728·54	8,860·71	79
80	1,783·7	8,503·8	35,664·6	243·29	1,456·69	7,132·17	80
81	1,471·9	6,720·1	27,160·8	215·04	1,213·40	5,675·48	81
82	1,200·2	5,248·2	20,440·7	187·52	998·36	4,462·08	82
83	966·53	4,047·99	15,192·54	161·28	810·84	3,463·72	83
84	768·05	3,081·46	11,144·55	136·72	649·56	2,652·88	84
85	601·80	2,313·41	8,063·09	114·11	512·84	2,003·32	85
86	464·57	1,711·61	5,749·68	93·63	398·73	1,490·48	86
87	353·05	1,247·04	4,038·07	75·57	305·10	1,091·75	87
88	263·90	893·99	2,791·03	59·90	229·53	786·65	88
89	193·85	630·09	1,897·04	46·60	169·63	557·12	89
90	139·81	436·24	1,266·95	35·51	123·03	387·49	90
91	98·917	296·429	830·713	26·53	87·52	264·46	91
92	68·585	197·512	534·284	19·39	60·99	176·94	92
93	46·560	128·927	336·772	13·85	41·60	115·95	93
94	30·916	82·367	207·845	9·66	27·75	74·35	94
95	20·058	51·451	125·478	6·60	18·09	46·60	95
96	12·703	31·393	74·027	4·37	11·49	28·51	96
97	7·8442	18·6904	42·6343	2·83	7·12	17·02	97
98	4·7180	10·8462	23·9439	1·77	4·29	9·90	98
99	2·7609	6·1282	13·0977	1·09	2·52	5·61	99
100	1·5701	3·3673	6·9695	·63	1·43	3·09	100
101	·8668	1·7972	3·6022	·38	·80	1·66	101
102	·4639	·9304	1·8050	·19	·42	·86	102
103	·2405	·4665	·8746	·12	·23	·44	103
104	·1205	·2260	·4081	·05	·11	·21	104
105	·0584	·1055	·1821	·03	·06	·10	105
106	·0273	·0471	·0766	·02	·03	·04	106
107	·0123	·0198	·0295	·01	·01	·01	107
108	·0053	·0075	·0097	·00	·00	·00	108
109	·0022	·0022	·0022	·00	·00	·00	109

YEARLY TABLE:—MALES. Interest 4 per Cent.

Age (x)	$\lambda\,D_x$	$\lambda\,N_x$	$\lambda\,M_x$	$\lambda\left(\frac{N_x}{D_x}\right)=\lambda\,A_x$	$\frac{N_x}{D_x}=A_x$	$\frac{D_x}{N_x}=a_x$	Age (x)
0	5·7090538	6·9130099	5·2943419	1·2039561	15·9940	·062524	0
1	5·6144369	6·8849703	5·0661194	1·2705334	18·6438	·053637	1
2	5·5685412	6·8610278	4·9590409	1·2924866	19·6104	·050993	2
3	5·5358132	6·8382972	4·8941101	1·3024840	20·0671	·049833	3
4	5·5082967	6·8160971	4·8481122	1·3078004	20·3142	·049227	4
5	5·4834547	6·7941741	4·8126792	1·3107194	20·4512	·048897	5
6	5·4604787	6·7724019	4·7852396	1·3119232	20·5080	·048761	6
7	5·4387205	6·7506913	4·7633036	1·3119708	20·5102	·048756	7
8	5·4176915	6·7289832	4·7447997	1·3112917	20·4782	·048832	8
9	5·3973294	6·7072401	4·7295206	1·3099107	20·4132	·048988	9
10	5·3774795	6·6854261	4·7167722	1·3079466	20·3211	·049210	10
11	5·3580003	6·6635108	4·7058982	1·3055105	20·2074	·049487	11
12	5·3387636	6·6414690	4·6963105	1·3027054	20·0773	·049807	12
13	5·3196543	6·6192806	4·6874772	1·2996263	19·9355	·050162	13
14	5·3005707	6·5969302	4·6789631	1·2963595	19·7861	·050541	14
15	5·2814242	6·5744065	4·6703997	1·2929823	19·6328	·050935	15
16	5·2621392	6·5517024	4·6614879	1·2895632	19·4788	·051338	16
17	5·2426536	6·5288140	4·6520131	1·2861604	19·3268	·051742	17
18	5·2229185	6·5057408	4·6418048	1·2828223	19·1788	·052141	18
19	5·2028979	6·4824845	4·6307551	1·2795866	19·0365	·052531	19
20	5·1825693	6·4590497	4·6188063	1·2764804	18·9008	·052908	20
21	5·1619234	6·4354420	4·6059466	1·2735186	18·7723	·053270	21
22	5·1411971	6·4116681	4·5930387	1·2704710	18·6411	·053645	22
23	5·1203931	6·3877224	4·5800924	1·2673293	18·5067	·054034	23
24	5·0995132	6·3635978	4·5671224	1·2640846	18·3690	·054440	24
25	5·0785583	6·3392870	4·5541431	1·2607287	18·2276	·054862	25
26	5·0575287	6·3147823	4·5411556	1·2572536	18·0823	·055303	26
27	5·0364235	6·2900749	4·5281653	1·2536514	17·9329	·055763	27
28	5·0152414	6·2651557	4·5151777	1·2499143	17·7793	·056245	28
29	4·9939798	6·2400148	4·5021898	1·2460350	17·6212	·056750	29
30	4·9726357	6·2146418	4·4891984	1·2420061	17·4585	·057279	30
31	4·9512050	6·1890248	4·4761999	1·2378198	17·2910	·057834	31
32	4·9296828	6·1631524	4·4631871	1·2334696	17·1187	·058416	32
33	4·9080633	6·1370115	4·4501526	1·2289482	16·9414	·059027	33
34	4·8863402	6·1105887	4·4370845	1·2242485	16·7590	·059669	34
35	4·8645059	6·0838694	4·4239712	1·2193635	16·5716	·060344	35
36	4·8425524	6·0568382	4·4108007	1·2142858	16·3789	·061054	36
37	4·8204705	6·0294787	4·3975614	1·2090082	16·1811	·061800	37
38	4·7982503	6·0017740	4·3842288	1·2035237	15·9780	·062586	38
39	4·7758813	5·9737055	4·3707950	1·1978242	15·7697	·063413	39
40	4·7533517	5·9452539	4·3572395	1·1919022	15·5562	·064283	40
41	4·7306492	5·9163981	4·3435413	1·1857489	15·3373	·065201	41
42	4·7077607	5·8871163	4·3296875	1·1793556	15·1132	·066167	42
43	4·6846721	5·8573856	4·3156563	1·1727135	14·8838	·067187	43
44	4·6613684	5·8271799	4·3014224	1·1658115	14·6491	·068263	44
45	4·6378340	5·7964731	4·2869742	1·1586391	14·4092	·069400	45
46	4·6140522	5·7652363	4·2722849	1·1511841	14·1639	·070602	46
47	4·5900058	5·7334380	4·2573379	1·1434322	13·9134	·071873	47
48	4·5656765	5·7010453	4·2421082	1·1353688	13·6574	·073220	48
49	4·5410452	5·6680223	4·2265770	1·1269771	13·3961	·074649	49
50	4·5160921	5·6343291	4·2107243	1·1182370	13·1292	·076166	50
51	4·4907963	5·5999234	4·1945288	1·1091271	12·8566	·077781	51
52	4·4648919	5·5647572	4·1774987	1·0998653	12·5853	·079457	52
53	4·4385426	5·5288010	4·1599731	1·0902584	12·3100	·081235	53
54	4·4117314	5·4920057	4·1419487	1·0802743	12·0302	·083124	54

YEARLY TABLE:—MALES. Interest 4 per Cent.

Age (x)	λD_x	λN_x	λM_x	$\lambda\left(\frac{N_x}{D_x}\right)=\lambda A_x$	$\frac{N_x}{D_x}=A_x$	$\frac{D_x}{N_x}=a_x$	Age (x)
55	4·3844308	5·4543158	4·1233988	1·0698850	11·7459	·085136	55
56	4·3566031	5·4156726	4·1042853	1·0590695	11·4570	·087283	56
57	4·3282004	5·3760091	4·0845545	1·0478087	11·1637	·089576	57
58	4·2991642	5·3352533	4·0641322	1·0360891	10·8665	·092026	58
59	4·2694258	5·2933272	4·0429396	1·0239014	10·5658	·094645	59
60	4·2389063	5·2501466	4·0208774	1·0112403	10·2622	·097445	60
61	4·2075163	5·2056211	3·9978458	0·9981048	9·9565	·100437	61
62	4·1751560	5·1596514	3·9737197	0·9844954	9·6493	·103635	62
63	4·1417156	5·1121356	3·9483753	0·9704200	9·3416	·107048	63
64	4·1070746	5·0629653	3·9216777	0·9558907	9·0342	·110690	64
65	4·0711025	5·0120185	3·8934721	0·9409160	8·7280	·114573	65
66	4·0336582	4·9591702	3·8636095	0·9255120	8·4239	·118710	66
67	3·9945904	4·9042865	3·8319241	0·9096961	8·1226	·123113	67
68	3·9537375	4·8472302	3·7982362	0·8934927	7·8252	·127793	68
69	3·9109276	4·7878500	3·7623702	0·8769224	7·5322	·132763	69
70	3·8659782	4·7259876	3·7241340	0·8600094	7·2445	·138035	70
71	3·8186969	4·6614767	3·6833272	0·8427798	6·9627	·143622	71
72	3·7688806	4·5941427	3·6397454	0·8252621	6·6875	·149533	72
73	3·7163161	4·5237998	3·5931753	0·8074837	6·4192	·155782	73
74	3·6607798	4·4502553	3·5433850	0·7894755	6·1585	·162377	74
75	3·6020377	4·3733038	3·4901398	0·7712661	5·9056	·169330	75
76	3·5398457	4·2927322	3·4332096	0·7528865	5·6609	·176650	76
77	3·4739491	4·2083177	3·3723246	0·7343686	5·4246	·184345	77
78	3·4040829	4·1198231	3·3072413	0·7157402	5·1969	·192424	78
79	3·3299721	4·0270069	3·2376794	0·6970348	4·9778	·200893	79
80	3·2513309	3·9296130	3·1633671	0·6782821	4·7674	·209758	80
81	3·1678636	3·8273757	3·0840040	0·6595121	4·5657	·219022	81
82	3·0792638	3·7200104	2·9992872	0·6407466	4·3727	·228693	82
83	2·9852151	3·6072394	2·9089352	0·6220243	4·1882	·238768	83
84	2·8853906	3·4887566	2·8126193	0·6033660	4·0120	·249249	84
85	2·7794531	3·3642526	2·7099819	0·5847995	3·8441	·260136	85
86	2·6670550	3·2334048	2·6006789	0·5663498	3·6843	·271425	86
87	2·5478385	3·0958805	2·4844422	0·5480420	3·5322	·283112	87
88	2·4214354	2·9513327	2·3608395	0·5298973	3·3876	·295191	88
89	2·2874672	2·7994026	2·2295027	0·5119354	3·2504	·307655	89
90	2·1455450	2·6397255	2·0900110	0·4941805	3·1202	·320494	90
91	1·9952698	2·4719207	1·9421073	0·4766509	2·9968	·333695	91
92	1·8362319	2·2955935	1·7852586	0·4593616	2·8798	·347247	92
93	1·6680117	2·1103439	1·6190933	0·4423322	2·7691	·361134	93
94	1·4901789	1·9157532	1·4432630	0·4255743	2·6642	·375341	94
95	1·3022931	1·7113938	1·2574386	0·4091007	2·5651	·389852	95
96	1·1039034	1·4968328	1·0603200	0·3929294	2·4713	·404642	96
97	0·8945488	1·2716186	0·8524800	0·3770698	2·3827	·419692	97
98	0·6737578	1·0352776	0·6324573	0·3615198	2·2989	·434991	98
99	0·4410486	0·7873329	0·4014005	0·3462843	2·2196	·450522	99
100	0·1959291	0·5272818	0·1553360	0·3313527	2·1446	·466281	100
101	$\bar{1}$·9378969	0·2545964	$\bar{1}$·9030900	0·3166995	2·0735	·482281	101
102	$\bar{1}$·6664391	$\bar{1}$·9686697	$\bar{1}$·6232493	0·3022306	2·0055	·498620	102
103	$\bar{1}$·3810328	$\bar{1}$·6688516	$\bar{1}$·3617278	0·2878188	1·9401	·515444	103
104	$\bar{1}$·0811445	$\bar{1}$·3541084	$\bar{1}$·0413927	0·2729639	1·8748	·533379	104
105	$\bar{2}$·7662304	$\bar{1}$·0232525	$\bar{2}$·7781513	0·2570221	1·8073	·553322	105
106	$\bar{2}$·4357365	$\bar{2}$·6730209	$\bar{2}$·4771213	0·2372844	1·7270	·579049	106
107	$\bar{2}$·0890984	$\bar{2}$·2966652	$\bar{2}$·0000000	0·2075668	1·6127	·620059	107
108	$\bar{3}$·7257413	$\bar{3}$·8750613	...	0·1493200	1·4103	·709055	108
109	$\bar{3}$·3450802	$\bar{3}$·3424227	...	$\bar{1}$·9973425	·9939	1·006138	109

YEARLY TABLE:—MALES. Interest 5 per Cent.

Age (x)	D_x	N_x	S_x	C_x	M_x	R_x	Age (x)
0	511,745	7,009,086	113,095,640	79,732·37	177,979·04	1,623,582·49	0
1	407,644	6,497,341	106,086,554	24,962·36	98,246·67	1,445,603·45	1
2	363,270	6,089,697	99,589,213	12,279·45	73,284·31	1,347,356·78	2
3	333,692	5,726,427	93,499,516	7,579·56	61,004·86	1,274,072·47	3
4	310,222	5,392,735	87,773,089	5,264·51	53,425·30	1,213,067·61	4
5	290,185	5,082,513	82,380,354	3,755·70	48,160·79	1,159,642·31	5
6	272,611	4,792,328	77,297,841	2,809·32	44,405·09	1,111,481·52	6
7	256,820	4,519,717	72,505,513	2,240·34	41,595·77	1,067,076·43	7
8	242,351	4,262,897	67,985,796	1,762·36	39,355·43	1,025,480·66	8
9	229,048	4,020,546	63,722,899	1,410·16	37,593·07	986,125·23	9
10	216,730	3,791,498	59,702,353	1,159·42	36,182·91	948,532·16	10
11	205,251	3,574,768	55,910,855	988·94	35,023·49	912,349·25	11
12	194,488	3,369,517	52,336,087	883·52	34,034·55	877,325·76	12
13	184,343	3,175,029	48,966,570	826·80	33,151·03	843,291·21	13
14	174,738	2,990,686	45,791,541	807·63	32,324·23	810,140·18	14
15	165,609	2,815,948	42,800,855	815·90	31,516·60	777,815·95	15
16	156,908	2,650,339	39,984,907	841·18	30,700·70	746,299·35	16
17	148,594	2,493,431	37,334,568	877·58	29,859·52	715,598·65	17
18	140,641	2,344,837	34,841,137	918·10	28,981·94	685,739·13	18
19	133,025	2,204,196	32,496,300	957·68	28,063·84	656,757·19	19
20	125,733	2,071,171	30,292,104	992·12	27,106·16	628,693·35	20
21	118,754	1,945,438	28,220,933	957·52	26,114·04	601,587·19	21
22	112,141	1,826,684	26,275,495	923·32	25,156·52	575,473·15	22
23	105,878	1,714,543	24,448,811	889·27	24,233·20	550,316·63	23
24	99,947	1,608,665	22,734,268	855·49	23,343·93	526,083·43	24
25	94,332	1,508,718	21,125,603	822·91	22,488·44	502,739·50	25
26	89,017	1,414,386	19,616,885	791·22	21,665·53	480,251·06	26
27	83,987	1,325,369	18,202,499	760·43	20,874·31	458,585·53	27
28	79,227	1,241,382	16,877,130	731·03	20,113·88	437,711·22	28
29	74,723	1,162,155	15,635,748	702·92	19,382·85	417,597·34	29
30	70,462	1,087,432	14,473,593	676·06	18,679·93	398,214·49	30
31	66,431	1,016,970	13,386,161	650·59	18,003·87	379,534·56	31
32	62,617	950,539	12,369,191	626·40	17,353·28	361,530·69	32
33	59,009	887,922	11,418,652	603·62	16,726·88	344,177·41	33
34	55,595	828,913	10,530,730	582·12	16,123·26	327,450·53	34
35	52,366	773,318	9,701,817	561·83	15,541·14	311,327·27	35
36	49,310	720,952	8,928,499	542·64	14,979·31	295,786·13	36
37	46,419	671,642	8,207,547	524·94	14,436·67	280,806·82	37
38	43,684	625,223	7,535,905	508·00	13,911·73	266,370·15	38
39	41,096	581,539	6,910,682	492·19	13,403·73	252,458·42	39
40	38,647	540,443	6,329,143	477·41	12,911·54	239,054·69	40
41	36,329	501,796	5,788,700	463·31	12,434·13	226,143·15	41
42	34,136	465,467	5,286,904	450·08	11,970·82	213,709·02	42
43	32,060	431,331	4,821,437	437·76	11,520·74	201,738·20	43
44	30,096	399,271	4,390,106	425·82	11,082·98	190,217·46	44
45	28,237	369,175	3,990,835	414·66	10,657·16	179,134·48	45
46	26,478	340,938	3,621,660	403·90	10,242·50	168,477·32	46
47	24,813	314,460	3,280,722	393·70	9,838·60	158,234·82	47
48	23,238	289,647	2,966,262	383·84	9,444·90	148,396·22	48
49	21,747	266,409	2,676,615	374·28	9,061·06	138,951·32	49
50	20,337	244,662	2,410,206	365·01	8,686·78	129,890·26	50
51	19,004	224,325	2,165,544	365·90	8,321·77	121,203·48	51
52	17,733	205,321	1,941,219	358·42	7,955·87	112,881·71	52
53	16,530	187,588	1,735,898	350·46	7,597·45	104,925·84	53
54	15,393	171,058	1,548,310	342·52	7,246·99	97,328·39	54

YEARLY TABLE:—MALES. Interest 5 per Cent.

Age (x)	D_x	N_x	S_x	C_x	M_x	R_x	Age (x)
55	14,317	155,665	1,377,252	334·73	6,904·47	90,081·40	55
56	13,301	141,348	1,221,587	327·29	6,569·74	83,176·93	56
57	12,340	128,047	1,080,239	320·38	6,242·45	76,607·19	57
58	11,432	115,707	952,192	313·89	5,922·07	70,364·74	58
59	10,574	104,275	836,485	307·94	5,608·18	64,442·67	59
60	9,762·2	93,701·3	732,210·1	302·30	5,300·24	58,834·49	60
61	8,995·0	83,939·1	638,508·8	297·08	4,997·94	53,534·25	61
62	8,269·6	74,944·1	554,569·7	292·00	4,700·86	48,536·31	62
63	7,583·9	66,674·5	479,625·6	286·95	4,408·86	43,835·45	63
64	6,935·7	59,090·6	412,951·1	281·88	4,121·91	39,426·59	64
65	6,323·6	52,154·9	353,860·5	276·49	3,840·03	35,304·68	65
66	5,746·0	45,831·3	301,705·6	270·70	3,563·54	31,464·65	66
67	5,201·6	40,085·3	255,874·3	264·41	3,292·84	27,901·11	67
68	4,689·6	34,883·7	215,789·0	257·37	3,028·43	24,608·27	68
69	4,208·9	30,194·1	180,905·3	249·55	2,771·06	21,579·84	69
70	3,758·9	25,985·2	150,711·2	240·86	2,521·51	18,808·78	70
71	3,339·1	22,226·3	124,726·0	231·21	2,280·65	16,287·27	71
72	2,948·8	18,887·2	102,499·7	220·60	2,049·44	14,006·62	72
73	2,587·8	15,938·4	83,612·5	209·09	1,828·84	11,957·18	73
74	2,255·5	13,350·6	67,674·1	196·72	1,619·75	10,128·34	74
75	1,951·4	11,095·1	54,323·5	183·52	1,423·03	8,508·59	75
76	1,674·9	9,143·7	43,228·4	169·76	1,239·51	7,085·56	76
77	1,425·4	7,468·8	34,084·7	155·49	1,069·75	5,846·05	77
78	1,202·0	6,043·4	26,615·9	140·99	914·26	4,776·30	78
79	1,003·8	4,841·4	20,572·5	126·43	773·27	3,862·04	79
80	829·57	3,837·62	15,731·14	112·07	646·84	3,088·77	80
81	678·00	3,008·05	11,893·52	98·11	534·77	2,441·93	81
82	547·61	2,330·05	8,885·47	84·74	436·66	1,907·16	82
83	436·79	1,782·44	6,555·42	72·19	351·92	1,470·50	83
84	343·79	1,345·65	4,772·98	60·61	279·73	1,118·58	84
85	266·81	1,001·86	3,427·33	50·11	219·12	838·85	85
86	204·01	735·05	2,425·47	40·72	169·01	619·73	86
87	153·56	531·04	1,690·42	32·56	128·29	450·72	87
88	113·69	377·48	1,159·38	25·56	95·73	322·43	88
89	82·715	263·793	781·900	19·70	70·17	226·70	89
90	59·089	181·078	518·107	14·86	50·47	156·53	90
91	41·407	121·989	337·029	11·00	35·61	106·06	91
92	28·437	80·582	215·040	7·96	24·61	70·45	92
93	19·121	52·145	134·458	5·64	16·65	45·84	93
94	12·575	33·024	82·313	3·89	11·01	29·19	94
95	8·0812	20·4485	49·2892	2·63	7·12	18·18	95
96	5·0691	12·3673	28·8407	1·73	4·49	11·06	96
97	3·1004	7·2982	16·4734	1·11	2·76	6·57	97
98	1·8470	4·1978	9·1752	·69	1·65	3·81	98
99	1·0706	2·3508	4·9774	·42	·96	2·16	99
100	·6030	1·2802	2·6266	·24	·54	1·20	100
101	·3297	·6772	1·3464	·14	·30	·66	101
102	·1748	·3475	·6692	·07	·16	·36	102
103	·0897	·1727	·3217	·04	·09	·20	103
104	·0446	·0830	·1490	·02	·05	·11	104
105	·0214	·0384	·0660	·01	·03	·06	105
106	·0099	·0170	·0276	·01	·02	·03	106
107	·0044	·0071	·0106	·01	·01	·01	107
108	·0019	·0027	·0035	...	...	...	108
109	·0008	·0008	·0008	...	...	...	109

YEARLY TABLE:—MALES. Interest 5 per Cent.

Age (x)	$\lambda\ D_x$	$\lambda\ N_x$	$\lambda\ M_x$	$\lambda\left(\frac{N_x}{D_x}\right)=\lambda A_x$	$\frac{N_x}{D_x}=A_x$	$\frac{D_x}{N_x}=a_x$	Age (x)
0	5·7090538	6·8456615	5·2503689	1·1366077	13·6964	·073012	0
1	5·6102809	6·8127357	4·9923178	1·2024548	15·9388	·062740	1
2	5·5602293	6·7845957	4·8650111	1·2243664	16·7636	·059653	2
3	5·5233453	6·7578837	4·7853644	1·2345384	17·1608	·058272	3
4	5·4916729	6·7318091	4·7277470	1·2401362	17·3835	·057526	4
5	5·4626749	6·7060786	4·6826936	1·2434037	17·5147	·057095	5
6	5·4355430	6·6805465	4·6474328	1·2450035	17·5794	·056885	6
7	5·4096288	6·6551113	4·6190492	1·2454825	17·5988	·056822	7
8	5·3844439	6·6297048	4·5950046	1·2452609	17·5898	·056851	8
9	5·3599258	6·6042851	4·5751078	1·2443593	17·5533	·056969	9
10	5·3359199	6·5788109	4·5585035	1·2428910	17·4941	·057162	10
11	5·3122847	6·5532479	4·5443594	1·2409632	17·4166	·057417	11
12	5·2888921	6·5275677	4·5319200	1·2386756	17·3251	·057720	12
13	5·2656269	6·5017476	4·5204970	1·2361207	17·2235	·058060	13
14	5·2423873	6·4757709	4·5095282	1·2333836	17·1153	·058427	14
15	5·2190848	6·4496246	4·4985394	1·2305398	17·0036	·058811	15
16	5·1956438	6·4233014	4·4871483	1·2276576	16·8911	·059203	16
17	5·1720023	6·3967974	4·4750829	1·2247951	16·7801	·059594	17
18	5·1481112	6·3701127	4·4621275	1·2220015	16·6725	·059979	18
19	5·1239347	6·3432502	4·4481471	1·2193155	16·5697	·060351	19
20	5·0994501	6·3162159	4·4330680	1·2167658	16·4727	·060706	20
21	5·0746482	6·2890174	4·4168741	1·2143692	16·3821	·061042	21
22	5·0497660	6·2616635	4·4006505	1·2118975	16·2891	·061391	22
23	5·0248060	6·2341484	4·3844108	1·2093424	16·1936	·061753	23
24	4·9997701	6·2064657	4·3681740	1·2066956	16·0952	·062130	24
25	4·9746593	6·1786081	4·3519593	1·2039488	15·9937	·062525	25
26	4·9494737	6·1505679	4·3357693	1·2010942	15·8889	·062937	26
27	4·9242126	6·1223369	4·3196121	1·1981243	15·7806	·063369	27
28	4·8988745	6·0939054	4·3034958	1·1950309	15·6686	·063822	28
29	4·8734570	6·0652642	4·2874176	1·1918072	15·5528	·064297	29
30	4·8479569	6·0364021	4·2713753	1·1884452	15·4328	·064797	30
31	4·8223702	6·0073082	4·2553659	1·1849380	15·3087	·065322	31
32	4·7966920	5·9779699	4·2393816	1·1812779	15·1802	·065875	32
33	4·7709167	5·9483748	4·2234150	1·1774581	15·0473	·066457	33
34	4·7450376	5·9185090	4·2074529	1·1734714	14·9098	·067070	34
35	4·7190474	5·8883581	4·1914829	1·1693107	14·7676	·067716	35
36	4·6929378	5·8579063	4·1754918	1·1649685	14·6207	·068396	36
37	4·6667000	5·8271379	4·1594671	1·1604379	14·4690	·069113	37
38	4·6403239	5·7960350	4·1433811	1·1557111	14·3124	·069870	38
39	4·6137988	5·7645789	4·1272257	1·1507801	14·1508	·070668	39
40	4·5871133	5·7327499	4·1109780	1·1456366	13·9842	·071509	40
41	4·5602549	5·7005272	4·0946155	1·1402723	13·8125	·072398	41
42	4·5332104	5·6678889	4·0781239	1·1346785	13·6357	·073337	42
43	4·5059658	5·6348107	4·0614804	1·1288449	13·4558	·074328	43
44	4·4785062	5·6012678	4·0446566	1·1227616	13·2667	·075377	44
45	4·4508158	5·5672323	4·0276415	1·1164165	13·0742	·076486	45
46	4·4228781	5·5326754	4·0104061	1·1097973	12·8765	·077661	46
47	4·3946757	5·4975654	3·9929333	1·1028897	12·6733	·078906	47
48	4·3661904	5·4618690	3·9751974	1·0956786	12·4646	·080227	48
49	4·3374032	5·4255489	3·9571790	1·0881457	12·2503	·081631	49
50	4·3082941	5·3885665	3·9388588	1·0802724	12·0302	·083124	50
51	4·2788424	5·3508777	3·9202157	1·0720353	11·8042	·084716	51
52	4·2487820	5·3124334	3·9006877	1·0636514	11·5785	·086367	52
53	4·2182768	5·2732051	3·8806679	1·0549283	11·3482	·088119	53
54	4·1873095	5·2331434	3·8601577	1·0458339	11·1131	·089984	54

YEARLY TABLE:—MALES. Interest 5 per Cent.

Age (x)	λD_x	λN_x	λM_x	$\lambda\left(\frac{N_x}{D_x}\right)=\lambda A_x$	$\frac{N_x}{D_x}=A_x$	$\frac{D_x}{N_x}=a_x$	Age (x)
55	4·1558530	5·1921910	3·8391303	1·0363380	10·8727	·091973	55
56	4·1238694	5·1502897	3·8175481	1·0264203	10·6272	·094098	56
57	4·0913107	5·1073694	3·7953551	1·0160587	10·3767	·096370	57
58	4·0581185	5·0633597	3·7724735	1·0052412	10·1214	·098800	58
59	4·0242242	5·0181803	3·7488219	0·9939561	9·8618	·101401	59
60	3·9895487	4·9717456	3·7242956	0·9821969	9·5984	·104184	60
61	3·9540027	4·9239643	3·6987911	0·9699616	9·3317	·107161	61
62	3·9174865	4·8747375	3·6721773	0·9572510	9·0626	·110344	62
63	3·8798901	4·8239598	3·6443263	0·9440697	8·7916	·113744	63
64	3·8410932	4·7715184	3·6150986	0·9304252	8·5197	·117375	64
65	3·8009651	4·7172951	3·5843346	0·9163300	8·2476	·121247	65
66	3·7593649	4·6611622	3·5518817	0·9017973	7·9762	·125373	66
67	3·7161411	4·6029851	3·5175706	0·8868440	7·7063	·129765	67
68	3·6711323	4·5426226	3·4812175	0·8714903	7·4386	·134434	68
69	3·6241663	4·4799221	3·4426459	0·8557558	7·1739	·139394	69
70	3·5750610	4·4147260	3·4016607	0·8396650	6·9130	·144655	70
71	3·5236237	4·3468672	3·3580587	0·8232435	6·6565	·150230	71
72	3·4696515	4·2761676	3·3116352	0·8065161	6·4050	·156129	72
73	3·4129310	4·2024447	3·2621757	0·7895137	6·1590	·162363	73
74	3·3532588	4·1255008	3·2094480	0·7722620	5·9192	·168942	74
75	3·2903408	4·0451312	3·1532141	0·7547904	5·6858	·175877	75
76	3·2239928	3·9611220	3·0932500	0·7371292	5·4592	·183177	76
77	3·1539402	3·8732508	3·0292824	0·7193106	5·2398	·190849	77
78	3·0799181	3·7812813	2·9610697	0·7013632	5·0276	·198901	78
79	3·0016513	3·6849710	2·8883312	0·6833197	4·8230	·207339	79
80	2·9188541	3·5840620	2·8107969	0·6652079	4·6260	·216168	80
81	2·8312308	3·4782851	2·7281670	0·6470543	4·4366	·225396	81
82	2·7384751	3·3673653	2·6401434	0·6288902	4·2549	·235023	82
83	2·6402705	3·2510149	2·5464439	0·6107444	4·0808	·245051	83
84	2·5562900	3·1289322	2·4467390	0·5926422	3·9142	·255481	84
85	2·4261965	3·0008070	2·3406820	0·5746105	3·7550	·266311	85
86	2·3096424	2·8663169	2·2279124	0·5566745	3·6031	·277540	86
87	2·1862700	2·7251272	2·1081928	0·5388572	3·4583	·289163	87
88	2·0557109	2·5768939	1·9810481	0·5211830	3·3203	·301174	88
89	1·9175867	2·4212633	1·8461515	0·5036766	3·1892	·313562	89
90	1·7715086	2·2578657	1·7050333	0·4863571	3·0645	·326319	90
91	1·6170774	2·0863207	1·5515720	0·4692433	2·9461	·339435	91
92	1·4538836	1·9062380	1·3911116	0·4523544	2·8337	·352895	92
93	1·2815074	1·7172127	1·2214142	0·4357053	2·7271	·366686	93
94	1·0995187	1·5188297	1·0417873	0·4193110	2·6261	·380793	94
95	0·9074769	1·3106615	0·8524800	0·4031846	2·5304	·395199	95
96	0·7049313	1·0922749	0·6522463	0·3873436	2·4397	·409880	96
97	0·4914207	0·8632158	0·4409091	0·3717951	2·3539	·424820	97
98	0·2664738	0·6230217	0·2174839	0·3565479	2·2727	·439999	98
99	0·0296086	0·3712157	$\bar{1}$·9822712	0·3416071	2·1959	·455400	99
100	$\bar{1}$·7803331	0·1072778	$\bar{1}$·7323938	0·3269447	2·1230	·471037	100
101	$\bar{1}$·5181449	$\bar{1}$·8307169	$\bar{1}$·4771213	0·3125720	2·0539	·486887	101
102	$\bar{1}$·2425312	$\bar{1}$·5409548	$\bar{1}$·2041200	0·2984236	1·9880	·503010	102
103	$\bar{2}$·9529689	$\bar{1}$·2372923	$\bar{2}$·9542425	0·2843234	1·9245	·519609	103
104	$\bar{2}$·6489247	$\bar{2}$·9190781	$\bar{2}$·6989700	0·2701534	1·8627	·536842	104
105	$\bar{2}$·3298546	$\bar{2}$·5843312	$\bar{2}$·4771213	0·2544766	1·7967	·556575	105
106	$\bar{3}$·9952048	$\bar{2}$·2304489	$\bar{2}$·3010300	0·2352441	1·7189	·581776	106
107	$\bar{3}$·6444107	$\bar{3}$·8512583	$\bar{2}$·0000000	0·2068476	1·6101	·621087	107
108	$\bar{3}$·2768976	$\bar{3}$·4313638	...	0·1544662	1·4271	·700703	108
109	$\bar{4}$·8920806	$\bar{4}$·9030900	...	0·0110094	1·0257	·974968	109

YEARLY TABLE:—MALES. Interest 5 per Cent.

A Table deduced from the **English Life Table, No. 3.**, for determining the **Value of Annuities, Assurances, &c.** on the whole of a stationary Population—or on the Part of the Population of the Age x and upwards.

Age (x)	$\frac{1}{100}\cdot v^x.\ Q_x = Q'_x$	$\Sigma\, Q'_x = Z_x$	$\frac{Z_{x+1}}{Q'_x} = A'_x$	$\lambda\left(\frac{1}{100}Q_x\right) + \lambda v^x = \lambda\ Q'_x$	$\lambda\ Z_x$	$\lambda\ Z_{x+1} - \lambda\ Q'_x = \lambda\ A'_x$	Age (x)
0	204,261	2,909,766	13·245	5·3101863	6·4638580	1·1220620	0
1	190,184	2,705,505	13·226	5·2791739	6·4322483	1·1214196	1
2	177,391	2,515,321	13·180	5·2489307	6·4005935	1·1199008	2
3	165,555	2,337,930	13·122	5·2189416	6·3688315	1·1179932	3
4	154,534	2,172,375	13·058	5·1890242	6·3369348	1·1158627	4
5	144,249	2,017,841	12·989	5·1591132	6·3048869	1·1135619	5
6	134,636	1,873,592	12·916	5·1291628	6·2726751	1·1111258	6
7	125,644	1,738,956	12·840	5·0991410	6·2402886	1·1085773	7
8	117,227	1,613,312	12·762	5·0690260	6·2077183	1·1059303	8
9	109,345	1,496,085	12·682	5·0388008	6·1749563	1·1031942	9
10	101,964	1,386,740	12·600	5·0084490	6·1419950	1·1003784	10
11	95,051	1,284,776	12·517	4·9779562	6·1088274	1·0974904	11
12	88,575	1,189,725	12·432	4·9473110	6·0754466	1·0945356	12
13	82,509	1,101,150	12·346	4·9165030	6·0418466	1·0915182	13
14	76,829	1,018,641	12·259	4·8855239	6·0080212	1·0884403	14
15	71,510	941,812	12·170	4·8543672	5·9739642	1·0853028	15
16	66,532	870,302	12·081	4·8230278	5·9396700	1·0821040	16
17	61,873	803,770	11·991	4·7915025	5·9051318	1·0788411	17
18	57,516	741,897	11·899	4·7597883	5·8703436	1·0755096	18
19	53,442	684,381	11·806	4·7278837	5·8352979	1·0721037	19
20	49,635	630,939	11·712	4·6957886	5·7999874	1·0686147	20
21	46,079	581,304	11·615	4·6635028	5·7644033	1·0650336	21
22	42,759	535,225	11·517	4·6310227	5·7285364	1·0613536	22
23	39,659	492,466	11·418	4·5983415	5·6923763	1·0575716	23
24	36,767	452,807	11·316	4·5654526	5·6559131	1·0536825	24
25	34,068	416,040	11·212	4·5323483	5·6191351	1·0496833	25
26	31,552	381,972	11·106	4·4990207	5·5820316	1·0455682	26
27	29,205	350,420	10·999	4·4654608	5·5445889	1·0413351	27
28	27,018	321,215	10·889	4·4316605	5·5067959	1·0369778	28
29	24,981	294,197	10·777	4·3976091	5·4686383	1·0324918	29
30	23,083	269,216	10·663	4·3632966	5·4301009	1·0278733	30
31	21,316	246,133	10·547	4·3287125	5·3911699	1·0231166	31
32	19,672	224,817	10·428	4·2938450	5·3518291	1·0182160	32
33	18,142	205,145	10·308	4·2586817	5·3120610	1·0131669	33
34	16,719	187,003	10·185	4·2232097	5·2718486	1·0079641	34
35	15,396	170,284	10·060	4·1874153	5·2311738	1·0026025	35
36	14,167	154,888	9·933	4·1512835	5·1900178	0·9970754	36
37	13,026	140,721	9·803	4·1147989	5·1483589	0·9913750	37
38	11,966	127,695	9·672	4·0779450	5·1061739	0·9854973	38
39	10,983	115,729	9·537	4·0407044	5·0634423	0·9794331	39
40	10,071	104,746	9·401	4·0030579	5·0201375	0·9731774	40
41	9,225	94,675	9·262	3·9649859	4·9762353	0·9667262	41
42	8,442	85,450	9·122	3·9264672	4·9317121	0·9600686	42
43	7,718	77,008	8·978	3·8874789	4·8865358	0·9531917	43
44	7,047	69,290	8·833	3·8479968	4·8406706	0·9460937	44
45	6,427	62,243	8·685	3·8079951	4·7940905	0·9387636	45
46	5,854	55,816	8·535	3·7674458	4·7467587	0·9311940	46
47	5,325	49,962	8·383	3·7263187	4·6986398	0·9233763	47
48	4,837	44,637	8·228	3·6845817	4·6496950	0·9153014	48
49	4,387	39,800	8·072	3·6421997	4·5998831	0·9069630	49
50	3,973	35,413	7·913	3·5991348	4·5491627	0·8983477	50
51	3,592	31,440	7·753	3·5553455	4·4974825	0·8894485	51
52	3,242	27,848	7·590	3·5107931	4·4447940	0·8802479	52
53	2,920	24,606	7·426	3·4654381	4·3910410	0·8707414	53
54	2,626	21,686	7·259	3·4192316	4·3361795	0·8608913	54

YEARLY TABLE:—MALES. Interest 5 per Cent.

A Table deduced from the **English Life Table, No. 3.**, for determining the **Value of Annuities, Assurances, &c.** on the whole of a stationary Population—or on the Part of the Population of the Age x and upwards.

Age (x)	$\frac{1}{100}\cdot v^x.\ Q_x = Q'_x$	$\Sigma Q'_x = Z_x$	$\frac{Z_{x+1}}{Q'_x} = A'_x$	$\lambda\left(\frac{1}{100} Q_x\right) + \lambda v^x = \lambda\ Q'_x$	$\lambda\ Z_x$	$\lambda\ Z_{x+1} - \lambda\ Q'_x = \lambda\ A'_x$	Age (x)
55	2,356	19,060	7·091	3·3721191	4·2801229	0·8507014	55
56	2,109	16,704	6·921	3·3240413	4·2228205	0·8401628	56
57	1,883	14,595	6·750	3·2749339	4·1642041	0·8292800	57
58	1,678	12,712	6·577	3·2247263	4·1042139	0·8180067	58
59	1,491	11,034	6·402	3·1733425	4·0427330	0·8063424	59
60	1,320	9,543	6·228	3·1207005	3·9796849	0·7943298	60
61	1,166	8,223	6·052	3·0667118	3·9150303	0·7819083	61
62	1,026	7,057	5·876	3·0112814	3·8486201	0·7691079	62
63	900	6,031	5·700	2·9543074	3·7803893	0·7558946	63
64	786	5,131	5·525	2·8956807	3·7102020	0·7423091	64
65	684	4,345	5·350	2·8352851	3·6379898	0·7283146	65
66	593	3,661	5·174	2·7729958	3·5635997	0·7138596	66
67	511	3,068	5·001	2·7086811	3·4868554	0·6990496	67
68	439	2,557	4·828	2·6422001	3·4077307	0·6837259	68
69	374	2,118	4·657	2·5734038	3·3259260	0·6681427	69
70	318	1,744	4·487	2·5021343	3·2415465	0·6519852	70
71	268	1,426	4·320	2·4282238	3·1541195	0·6354848	71
72	225	1,158	4·153	2·3514958	3·0637086	0·6183858	72
73	187	933	3·990	2·2717634	2·9698816	0·6009754	73
74	154	746	3·833	2·1888303	2·8727388	0·5834914	74
75	127	592	3·673	2·1024896	2·7723217	0·5649634	75
76	103	465	3·517	2·0125243	2·6674530	0·5461843	76
77	83	362	3·364	1·9187062	2·5587086	0·5268980	77
78	66	279	3·218	1·8207962	2·4456042	0·5075834	78
79	52	213	3·078	1·7185454	2·3283796	0·4882805	79
80	41	161	2·934	1·6116927	2·2068259	0·4674885	80
81	32	120	2·783	1·4999647	2·0791812	0·4445180	81
82	24	88	2·649	1·3830777	1·9444827	0·4231023	82
83	18	64	2·524	1·2607368	1·8061800	0·4020210	83
84	14	46	2·358	1·1326345	1·6627578	0·3725155	84
85	10	32	2·208	0·9984569	1·5051500	0·3439658	85
86	7	22	2·081	0·8578654	1·3424227	0·3182259	86
87	5	15	1·947	0·7105232	1·1760913	0·2894768	87
88	4	10	1·668	0·5560729	1·0000000	0·2220784	88
89	2	6	1·614	0·3941614	0·7781513	0·2078986	89
90	2	4	1·193	0·2243893	0·6020600	0·0766407	90
91	1	2	·899	0·0463776	0·3010300	$\bar{1}$·9536224	91
92	1	1	...	$\bar{1}$·8597400	0·0000000	...	92
93	...	...	...	$\bar{1}$·6640740	...	...	93
94	...	...	...	$\bar{1}$·4589168	...	...	94
95	...	...	...	$\bar{1}$·2437343	...	...	95
96	...	...	...	$\bar{1}$·0181364	...	...	96
97	...	...	...	$\bar{2}$·7815947	...	...	97
98	...	...	...	$\bar{2}$·5341089	...	...	98
99	...	...	...	$\bar{2}$·2751714	...	...	99
100	...	...	...	$\bar{2}$·0049217	...	...	100

Note.—The first and second columns in this Table correspond in the nature of their construction and relations with the columns D and N in the previous Tables for calculating Life Annuities. The numbers in the first column are obtained by multiplying the numbers in the column Q of the Life Table by the successive powers of $v = \frac{1}{1\cdot05}$ (when the interest of money is 5 per cent.), and dividing by 100. The division by 100 is equivalent to cutting off 2 figures, which is done merely for the sake of convenience, as the Table in its present form is sufficiently extensive for all the purposes to which it can be applied. The v varies with the interest of money.

YEARLY TABLE:—MALES. Interest 6 per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	511,745	6,126,391	6·7872047	55	8,500·4	85,970·5	4·9343495
1	403,798	5,614,646	6·7493224	56	7,822·4	77,470·1	4·8891342
2	356,448	5,210,848	6·7169084	57	7,189·0	69,647·7	4·8429067
3	324,336	4,854,400	6·6861356	58	6,597·2	62,458·7	4·7955929
4	298,680	4,530,064	6·6561044	59	6,044·3	55,861·5	4·7471126
5	276,753	4,231,384	6·6264824	60	5,527·8	49,817·2	4·6973793
6	257,539	3,954,631	6·5971060	61	5,045·4	44,289·4	4·6462998
7	240,333	3,697,092	6·5678602	62	4,594·7	39,244·0	4·5937733
8	224,653	3,456,759	6·5386691	63	4,173·9	34,649·3	4·5396945
9	210,318	3,232,106	6·5094856	64	3,781·2	30,475·4	4·4839494
10	197,131	3,021,788	6·4802640	65	3,415·0	26,694·2	4·4264169
11	184,928	2,824,657	6·4509658	66	3,073·8	23,279·2	4·3669680
12	173,577	2,639,729	6·4215594	67	2,756·3	20,205·4	4·3054675
13	162,971	2,466,152	6·3920199	68	2,461·5	17,449·1	4·2417730
14	153,023	2,303,181	6·3623281	69	2,188·4	14,987·6	4·1757321
15	143,660	2,150,158	6·3324704	70	1,936·0	12,799·2	4·1071828
16	134,828	2,006,498	6·3024387	71	1,703·5	10,863·2	4·0359578
17	126,480	1,871,670	6·2722292	72	1,490·2	9,159·7	3·9618812
18	118,580	1,745,190	6·2418427	73	1,295·5	7,669·5	3·8847671
19	111,101	1,626,610	6·2112835	74	1,118·4	6,374·0	3·8044121
20	104,020	1,515,509	6·1805585	75	958·51	5,255·58	3·7206206
21	97,320	1,411,489	6·1496775	76	814·96	4,297·07	3·6331725
22	91,034	1,314,169	6·1186513	77	687·01	3,482·11	3·5418425
23	85,138	1,223,135	6·0874745	78	573·89	2,795·10	3·4463974
24	79,611	1,137,997	6·0561413	79	474·73	2,221·21	3·3465897
25	74,430	1,058,386	6·0246442	80	388·62	1,746·48	3·2421636
26	69,573	983,956	5·9929756	81	314·62	1,357·86	3·1328550
27	65,023	914,383	5·9611281	82	251·72	1,043·24	3·0183843
28	60,759	849,360	5·9290918	83	198·88	791·52	2·8984619
29	56,764	788,601	5·8968574	84	155·06	592·64	2·7727910
30	53,022	731,837	5·8644143	85	119·20	437·58	2·6410575
31	49,517	678,815	5·8317514	86	90·285	318·375	2·5029390
32	46,234	629,298	5·7988563	87	67·318	228·090	2·3581062
33	43,159	583,064	5·7657162	88	49·369	160·772	2·2062104
34	40,279	539,905	5·7323174	89	35·581	111·403	2·0468969
35	37,581	499,626	5·6986450	90	25·178	75·822	1·8797952
36	35,054	462,045	5·6646843	91	17·477	50·644	1·7045280
37	32,688	426,991	5·6304187	92	11·889	33·167	1·5207062
38	30,472	394,303	5·5958301	93	7·9189	21·2784	1·3279390
39	28,396	363,831	5·5608997	94	5·1590	13·3595	1·1257902
40	26,452	335,435	5·5256084	95	3·2840	8·2005	0·9138403
41	24,631	308,983	5·4899346	96	2·0405	4·9165	0·6916560
42	22,925	284,352	5·4538563	97	1·2363	2·8760	0·4587889
43	21,328	261,427	5·4173504	98	·7295	1·6397	0·2147644
44	19,832	240,099	5·3803904	99	·4189	·9102	$\bar{1}$·9591368
45	18,432	220,267	5·3429495	100	·2337	·4913	$\bar{1}$·6913468
46	17,120	201,835	5·3049965	101	·1266	·2576	$\bar{1}$·4109459
47	15,893	184,715	5·2665022	102	·0665	·1310	$\bar{1}$·1172713
48	14,743	168,822	5·2274290	103	·0338	·0645	$\bar{2}$·8095597
49	13,668	154,079	5·1877435	104	·0166	·0307	$\bar{2}$·4871384
50	12,661	140,411	5·1474011	105	·0079	·0141	$\bar{2}$·1492191
51	11,719	127,750	5·1063609	106	·0036	·0062	$\bar{3}$·7923917
52	10,832	116,031	5·0645741	107	·0016	·0026	$\bar{3}$·4149733
53	10,002	105,199	5·0220117	108	·0007	·0010	$\bar{3}$·0000000
54	9,226·0	95,196·5	4·9786210	109	·0003	·0003	$\bar{4}$·4771213

YEARLY TABLE:—MALES. Interest 7 per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	511,745	5,445,241	6·7360171	55	5,071·7	47,927·3	4·6805829
1	400,024	4,933,496	6·6931547	56	4,623·6	42,855·6	4·6320076
2	349,817	4,533,472	6·6564309	57	4,209·5	38,232·0	4·5824270
3	315,328	4,183,655	6·6215559	58	3,826·8	34,022·5	4·5317662
4	287,670	3,868,327	6·5875232	59	3,473·4	30,195·7	4·4799451
5	264,060	3,580,657	6·5539628	60	3,146·9	26,722·3	4·4268739
6	243,431	3,316,597	6·5206927	61	2,845·4	23,575·4	4·3724591
7	225,044	3,073,166	6·4875861	62	2,567·0	20,730·0	4·3165993
8	208,395	2,848,122	6·4545586	63	2,310·1	18,163·0	4·2591876
9	193,275	2,639,727	6·4215591	64	2,073·2	15,852·9	4·2001088
10	179,463	2,446,452	6·3885368	65	1,854·9	13,779·7	4·1392398
11	166,781	2,266,989	6·3554494	66	1,654·0	11,924·8	4·0764512
12	155,081	2,100,208	6·3222624	67	1,469·3	10,270·8	4·0116042
13	144,244	1,945,127	6·2889480	68	1,299·9	8,801·5	3·9445567
14	134,173	1,800,883	6·2554855	69	1,144·8	7,501·6	3·8751539
15	124,786	1,666,710	6·2218600	70	1,003·3	6,356·8	3·8032385
16	116,020	1,541,924	6·1880629	71	874·61	5,353·52	3·7286394
17	107,819	1,425,904	6·1540903	72	757·96	4,478·91	3·6511724
18	100,141	1,318,085	6·1199435	73	652·73	3,720·95	3·5706539
19	92,948	1,217,944	6·0856273	74	558·27	3,068·22	3·4868865
20	86,211	1,124,996	6·0511510	75	473·97	2,509·95	3·3996651
21	79,903	1,038,785	6·0165257	76	399·22	2,035·98	3·3087735
22	74,044	958,882	5·9817652	77	333·40	1,636·76	3·2139850
23	68,601	884,838	5·9468637	78	275·90	1,303·36	3·1150644
24	63,548	816,237	5·9118163	79	226·09	1,027·46	3·0117650
25	58,857	752,689	5·8766155	80	183·36	801·37	2·9038331
26	54,503	693,832	5·8412543	81	147·05	618·01	2·7909955
27	50,462	639,329	5·8057244	82	116·55	470·96	2·6729840
28	46,712	588,867	5·7700172	83	91·228	354·412	2·5495084
29	43,233	542,155	5·7341235	84	70·462	263·184	2·4202595
30	40,006	498,922	5·6980326	85	53·662	192·722	2·2849313
31	37,012	458,916	5·6617332	86	40·264	139·060	2·1432022
32	34,235	421,904	5·6252136	87	29·741	98·796	1·9947394
33	31,659	387,669	5·5884611	88	21·607	69·055	1·8391951
34	29,270	356,010	5·5514622	89	15·427	47·448	1·6762179
35	27,055	326,740	5·5142023	90	10·814	32·021	1·5054349
36	25,000	299,685	5·4766651	91	7·4367	21·2073	1·3264854
37	23,094	274,685	5·4388349	92	5·0118	13·7706	1·1389529
38	21,327	251,591	5·4006951	93	3·3069	8·7588	0·9424446
39	19,689	230,264	5·3622261	94	2·1342	5·4519	0·7365479
40	18,169	210,575	5·3234068	95	1·3459	3·3177	0·5208371
41	16,760	192,406	5·2842186	96	·8284	1·9718	0·2948629
42	15,454	175,646	5·2446383	97	·4972	1·1434	0·0581982
43	14,243	160,192	5·2046408	98	·2907	·6462	$\bar{1}$·8103670
44	13,120	145,949	5·1642011	99	·1653	·3555	$\bar{1}$·5508396
45	12,080	132,829	5·1232929	100	·0914	·1902	$\bar{1}$·2792105
46	11,116	120,749	5·0818835	101	·0490	·0988	$\bar{2}$·9947569
47	10,222	109,633	5·0399413	102	·0255	·0498	$\bar{2}$·6972293
48	9,394·1	99,410·9	4·9974340	103	·0129	·0243	$\bar{2}$·3856063
49	8,627·3	90,016·8	4·9543235	104	·0063	·0114	$\bar{2}$·0569049
50	7,917·2	81,389·5	4·9105684	105	·0029	·0051	$\bar{3}$·7075702
51	7,259·8	73,472·3	4·8661237	106	·0013	·0022	$\bar{3}$·3424227
52	6,647·7	66,212·5	4·8209400	107	·0006	·0009	$\bar{4}$·9542425
53	6,080·9	59,564·8	4·7749897	108	·0002	·0003	$\bar{4}$·4771213
54	5,556·6	53,483·9	4·7282231	109	·0001	·0001	$\bar{4}$·0000000

YEARLY TABLE:—MALES. Interest 8 per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	511,745	4,906,777	6·6907963	55	3,040·6	26,958·2	4·4306909
1	396,320	4,395,032	6·6429621	56	2,746·2	23,917·6	4·3787176
2	343,368	3,998,712	6·6019201	57	2,477·1	21,171·4	4·3257496
3	306,649	3,655,344	6·5629283	58	2,231·1	18,694·3	4·2717092
4	277,163	3,348,695	6·5248756	59	2,006·3	16,463·2	4·2165143
5	252,059	3,071,532	6·4873551	60	1,800·9	14,456·9	4·1600752
6	230,216	2,819,473	6·4501680	61	1,613·2	12,656·0	4·1022965
7	210,857	2,589,257	6·4131752	62	1,442·0	11,042·8	4·0430793
8	193,450	2,378,400	6·3762849	63	1,285·6	9,600·8	3·9823074
9	177,752	2,184,950	6·3394415	64	1,143·1	8,315·2	3·9198727
10	163,522	2,007,198	6·3025901	65	1,013·3	7,172·1	3·8556463
11	150,559	1,843,676	6·2656846	66	895·14	6,158·80	3·7894961
12	138,701	1,693,117	6·2286870	67	787·83	5,263·66	3·7212878
13	127,814	1,554,416	6·1915673	68	690·54	4,475·83	3·6508736
14	117,789	1,426,602	6·1543028	69	602·54	3,785·29	3·5780992
15	108,535	1,308,813	6·1168776	70	523·18	3,182·75	3·5028025
16	99,975	1,200,278	6·0792819	71	451·83	2,659·57	3·4248114
17	92,048	1,100,303	6·0415123	72	387·95	2,207·74	3·3439479
18	84,701	1,008,255	6·0035705	73	330·99	1,819·79	3·2600213
19	77,890	923,554	5·9654623	74	280·47	1,488·80	3·1728364
20	71,575	845,664	5·9271978	75	235·92	1,208·33	3·0821856
21	65,724	774,089	5·8887909	76	196·87	972·41	2·9878494
22	60,340	708,365	5·8502571	77	162·89	775·54	2·8896042
23	55,388	648,025	5·8115918	78	133·55	612·65	2·7872124
24	50,833	592,637	5·7727888	79	108·42	479·10	2·6804262
25	46,644	541,804	5·7338422	80	87·116	370·676	2·5689945
26	42,794	495,160	5·6947456	81	69·221	283·560	2·4526450
27	39,254	452,366	5·6554900	82	54·356	214·339	2·3311012
28	36,001	413,112	5·6160678	83	42·151	159·983	2·2040738
29	33,011	377,111	5·5764692	84	32·255	117·832	2·0712633
30	30,264	344,100	5·5366847	85	24·337	85·577	1·9323571
31	27,740	313,836	5·4967028	86	18·092	61·240	1·7870352
32	25,421	286,096	5·4565118	87	13·240	43·148	1·6349607
33	23,291	260,675	5·4160994	88	9·5297	29·9080	1·4757874
34	21,334	237,384	5·3754514	89	6·7409	20·3783	1·3091680
35	19,536	216,050	5·3345543	90	4·6817	13·6374	1·1347316
36	17,885	196,514	5·2933935	91	3·1896	8·9557	0·9520995
37	16,369	178,629	5·2519520	92	2·1297	5·7661	0·7608822
38	14,977	162,260	5·2102115	93	1·3922	3·6364	0·5606716
39	13,698	147,283	5·1681527	94	·8902	2·2442	0·3510616
40	12,524	133,585	5·1257577	95	·5562	1·3540	0·1316187
41	11,446	121,061	5·0830043	96	·3392	·7978	$\bar{1}$·9018940
42	10,456	109,615	5·0398701	97	·2017	·4586	$\bar{1}$·6614341
43	9,547·4	99,159·3	4·9963334	98	·1168	·2569	$\bar{1}$·4097641
44	8,713·4	89,611·9	4·9523657	99	·0658	·1401	$\bar{1}$·1464381
45	7,948·1	80,898·5	4·9079405	100	·0360	·0743	$\bar{2}$·8709888
46	7,245·9	72,950·4	4·8630277	101	·0192	·0383	$\bar{2}$·5831988
47	6,601·7	65,704·5	4·8175951	102	·0099	·0191	$\bar{2}$·2810334
48	6,010·9	59,102·8	4·7716080	103	·0049	·0092	$\bar{3}$·9637878
49	5,469·1	53,091·9	4.7250283	104	·0024	·0043	$\bar{3}$·6334685
50	4,972·5	47,622·8	4·6778150	105	·0011	·0019	$\bar{3}$·2787536
51	4,517·4	42,650·3	4·6299221	106	·0005	·0008	$\bar{4}$·9030900
52	4,098·2	38,132·9	4·5812999	107	·0002	·0003	$\bar{4}$·4771213
53	3,714·1	34,034·7	4·5319220	108	·0001	·0001	$\bar{4}$·0000000
54	3,362·4	30,320·6	4·4817378	109	...	...	...

YEARLY TABLE:—MALES. Interest 9 per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	511,745	4,472,060	6·6505076	55	1,831·5	15,292·7	4·1844842
1	392,684	3,960,315	6·5977298	56	1,639·0	13,461·2	4·1290838
2	337,097	3,567,631	6·5523799	57	1,464·8	11,822·2	4·0726983
3	298,287	3,230,534	6·5092743	58	1,307·3	10,357·4	4·0152508
4	267,131	2,932,247	6·4672005	59	1,164·7	9,050·1	3·9566534
5	240,707	2,665,116	6·4257161	60	1,035·9	7,885·4	3·8968237
6	217,831	2,424,409	6·3846059	61	919·46	6,849·52	3·8356602
7	197,683	2,206,578	6·3437193	62	814·29	5,930·06	3·7730591
8	179,699	2,008,895	6·3029572	63	719·36	5,115·77	3·7089111
9	163,603	1,829,196	6·2622602	64	633·74	4,396·41	3·6430982
10	149,124	1,665,593	6·2215689	65	556·61	3,762·67	3·5754962
11	136,043	1,516,469	6·1808336	66	487·20	3,206·06	3·5059717
12	124,178	1,380,426	6·1400132	67	424·86	2,718·86	3·4343868
13	113,382	1,256,248	6·0990755	68	368·98	2,294·00	3·3605934
14	103,530	1,142,866	6·0579954	69	319·01	1,925·02	3·2844352
15	94,521	1,039,336	6·0167560	70	274·45	1,606·01	3·2057482
16	86,268	944,815	5·9753468	71	234·85	1,331·56	3·1243608
17	78,699	858,547	5·9337641	72	199·79	1,096·71	3·0400918
18	71,753	779,848	5·8920100	73	168·89	896·92	2·9527537
19	65,377	708,095	5·8500916	74	141·80	728·03	2·8621493
20	59,526	642,718	5·8080205	75	118·18	586·23	2·7680680
21	54,159	583,192	5·7658116	76	97·716	468·053	2·6702950
22	49,266	529,033	5·7234828	77	80·108	370·337	2·5685971
23	44,807	479,767	5·6810304	78	65·075	290·229	2·4627408
24	40,745	434,960	5·6384493	79	52·349	225·154	2·3524797
25	37,045	394,215	5·5957332	80	41·675	172·805	2·2375563
26	33,675	357,170	5·5528750	81	32·811	131·130	2·1177021
27	30,606	323,495	5·5098676	82	25·528	98·319	1·9926375
28	27,812	292,889	5·4667030	83	19·615	72·791	1·8620777
29	25,268	265,077	5·4233721	84	14·872	53·176	1·7257157
30	22,953	239,809	5·3798655	85	11·118	38·304	1·5832441
31	20,846	216,856	5·3361715	86	8·1892	27·1857	1·4343405
32	18,928	196,010	5·2922782	87	5·9379	18·9965	1·2786736
33	17,183	177,082	5·2481744	88	4·2348	13·0586	1·1158966
34	15,595	159,899	5·2038458	89	2·9681	8·8238	0·9456557
35	14,150	144,304	5·1592783	90	2·0425	5·8557	0·7675788
36	12,835	130,154	5·1144575	91	1·3788	3·8132	0·5812896
37	11,639	117,319	5·0693684	92	·9121	2·4344	0·3863919
38	10,551	105,680	5·0239928	93	·5908	1·5223	0·1825002
39	9,562·0	95,128·9	4·9783125	94	·3743	·9315	$\bar{1}$·9691829
40	8,662·1	85,566·9	4·9323058	95	·2317	·5572	$\bar{1}$·7460111
41	7,843·9	76,904·8	4·8859535	96	·1400	·3255	$\bar{1}$·5125510
42	7,099·8	69,060·9	4·8392323	97	·0825	·1855	$\bar{1}$·2683439
43	6,423·4	61,961·1	4·7921191	98	·0473	·1030	$\bar{1}$·0128372
44	5,808·6	55,537·7	4·7445879	99	·0264	·0557	$\bar{2}$·7458552
45	5,249·8	49,729·1	4·6966106	100	·0143	·0293	$\bar{2}$·4668676
46	4,742·1	44,479·3	4·6481579	101	·0076	·0150	$\bar{2}$·1760913
47	4,280·8	39,737·2	4·5991973	102	·0039	·0074	$\bar{3}$·8692317
48	3,861·9	35,456·4	4·5496946	103	·0019	·0035	$\bar{3}$·5440680
49	3,481·6	31,594·5	4·4996115	104	·0009	·0016	$\bar{3}$·2041200
50	3,136·4	28,112·9	4·4489057	105	·0004	·0007	$\bar{4}$·8450980
51	2,823·2	24,976·5	4·3975316	106	·0002	·0003	$\bar{4}$·4771213
52	2,537·7	22,153·3	4·3454384	107	·0001	·0001	$\bar{4}$·0000000
53	2,278·8	19,615·6	4·2926016	108	...	...	...
54	2,044·1	17,336·8	4·2389689	109	...	...	...

YEARLY TABLE:—MALES. Interest 10 per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	511,745	4,114,630	6·6143308	55	1,108·3	8,745·8	3·9417995
1	389,115	3,602,885	6·5566504	56	982·83	7,637·51	3·8829518
2	330,996	3,213,770	6·5070148	57	870·40	6,654·68	3·8231272
3	290,225	2,882,774	6·4598106	58	769·70	5,784·28	3·7622493
4	257,549	2,592,549	6·4137270	59	679·55	5,014·58	3·7002346
5	229,963	2,335,000	6·3682869	60	598·89	4,335·03	3·6369921
6	206,216	2,105,037	6·3232597	61	526·74	3,736·14	3·5724231
7	185,441	1,898,821	6·2784840	62	462·25	3,209·40	3·5064238
8	167,039	1,713,380	6·2338537	63	404·65	2,747·15	3·4388824
9	150,694	1,546,341	6·1893053	64	353·25	2,342·50	3·3696796
10	136,109	1,395,647	6·1447756	65	307·43	1,989·25	3·2986894
11	123,040	1,259,538	6·1002114	66	266·65	1,681·82	3·2257795
12	111,289	1,136,498	6·0555688	67	230·42	1,415·17	3·1508086
13	100,689	1,025,209	6·0108124	68	198·29	1,184·75	3·0736268
14	91,105	924,520	5·9659163	69	169·88	986·46	2·9940795
15	82,420	833,415	5·9208613	70	144·82	816·58	2·9119987
16	74,540	750,995	5·8756371	71	122·80	671·76	2·8272141
17	67,382	676,455	5·8302389	72	103·52	548·96	2·7395407
18	60,877	609,073	5·7846693	73	86·713	445·443	2·6487921
19	54,963	548,196	5·7389358	74	72·142	358·730	2·5547677
20	49,589	493,233	5·6930521	75	59·578	286·588	2·4572580
21	44,707	443,644	5·6470346	76	48·813	227·010	2·3560450
22	40,299	398,937	5·6009043	77	39·653	178·197	2·2509004
23	36,319	358,638	5·5546563	78	31·919	138·544	2·1415877
24	32,726	322,319	5·5082860	79	25·444	106·625	2·0278591
25	29,483	289,593	5·4617881	80	20·072	81·181	1·9094544
26	26,557	260,110	5·4151570	81	15·659	61·109	1·7861052
27	23,918	233,553	5·3683855	82	12·073	45·450	1·6575339
28	21,537	209,635	5·3214638	83	9·1916	33·3769	1·5234460
29	19,389	188,098	5·2743842	84	6·9057	24·1853	1·3835515
30	17,452	168,709	5·2271382	85	5·1157	17·2796	1·2375337
31	15,706	151,257	5·1797155	86	3·7338	12·1639	1·0850728
32	14,131	135,551	5·1321027	87	2·6827	8·4301	0·9258327
33	12,712	121,420	5·0842902	88	1·8959	5·7474	0·7594714
34	11,432	108,708	5·0362616	89	1·3167	3·8515	0·5856299
35	10,278	97,276	4·9880057	90	·8979	2·5348	0·4039437
36	9,238·8	86,997·7	4·9395078	91	·6006	1·6369	0·2140221
37	8,301·8	77,758·9	4·8907501	92	·3937	1·0363	0·0154855
38	7,457·5	69,457·1	4·8417166	93	·2527	·6426	$\bar{1}$·8079407
39	6,696·8	61,999·6	4·7923889	94	·1586	·3899	$\bar{1}$·5909532
40	6,011·4	55,302·8	4·7427471	95	·0973	·2313	$\bar{1}$·3641756
41	5,394·1	49,291·4	4·6927711	96	·0583	·1340	$\bar{1}$·1271048
42	4,838·0	43,897·3	4·6424378	97	·0340	·0757	$\bar{2}$·8790959
43	4,337·3	39,059·3	4·5917244	98	·0193	·0417	$\bar{2}$·6201361
44	3,886·5	34,722·0	4·5406047	99	·0107	·0224	$\bar{2}$·3502480
45	3,480·7	30,835·5	4·4890510	100	·0058	·0117	$\bar{2}$·0681859
46	3,115·5	27,354·8	4·4370335	101	·0030	·0059	$\bar{3}$·7708520
47	2,786·9	24,239·3	4·3845201	102	·0015	·0029	$\bar{3}$·4623980
48	2,491·3	21,452·4	4·3314759	103	·0007	·0014	$\bar{3}$·1461280
49	2,225·5	18,961·1	4·2778635	104	·0004	·0007	$\bar{4}$·8450980
50	1,986·7	16,735·6	4·2236413	105	·0002	·0003	$\bar{4}$·4771213
51	1,772·0	14,748·9	4·1687597	106	·0001	·0001	$\bar{4}$·0000000
52	1,578·4	12,976·9	4·1131710	107	...	...	...
53	1,404·4	11,398·5	4·0568478	108	...	...	...
54	1,248·3	9,994·1	3·9997437	109	...	...	...

SINGLE LIVES.

YEARLY TABLE.

FEMALES.

With Interest.

ENGLISH LIFE TABLE, No. 3.

YEARLY TABLE:—FEMALES.

Logarithms of the Series D_x; Rates of Interest 3, $3\frac{1}{4}$, $3\frac{1}{3}$, and $3\frac{1}{2}$ per Cent.

$\lambda\ D_x$

Age (x)	3 per cent.	Age (x)	$3\frac{1}{4}$ per cent.	Age (x)	$3\frac{1}{3}$ per cent.	Age (x)	$3\frac{1}{2}$ per cent.
0	5·6886465	0	5·6886465	0	5·6886465	0	5·6886465
1	5·6129697	1	5·6119168	1	5·6115665	1	5·6108666
2	5·5723735	2	5·5702678	2	5·5695670	2	5·5681672
3	5·5438916	3	5·5407331	3	5·5396820	3	5·5375823
4	5·5204254	4	5·5162141	4	5·5148125	4	5·5120129
5	5·4998405	5	5·4945763	5	5·4928244	5	5·4893249
6	5·4811983	6	5·4748813	6	5·4727790	6	5·4685795
7	5·4637539	7	5·4563840	7	5·4539314	7	5·4490320
8	5·4469558	8	5·4385332	8	5·4357301	8	5·4301308
9	5·4307681	9	5·4212926	9	5·4181392	9	5·4118400
10	5·4150471	10	5·4045187	10	5·4010149	10	5·3940158
11	5·3996612	11	5·3880800	11	5·3842259	11	5·3765268
12	5·3844914	12	5·3718573	12	5·3676528	12	5·3592539
13	5·3694305	13	5·3557437	13	5·3511888	13	5·3420899
14	5·3543840	14	5·3396443	14	5·3347390	14	5·3249402
15	5·3392692	15	5·3234766	15	5·3182210	15	5·3077223
16	5·3240158	16	5·3071704	16	5·3015644	16	5·2903658
17	5·3085658	17	5·2906676	17	5·2847112	17	5·2728127
18	5·2928734	18	5·2739223	18	5·2676155	18	5·2550171
19	5·2769048	19	5·2569010	19	5·2502438	19	5·2369455
20	5·2606388	20	5·2395821	20	5·2325746	20	5·2185763
21	5·2440662	21	5·2219567	21	5·2145987	21	5·1999006
22	5·2273961	22	5·2042337	22	5·1965254	22	5·1811273
23	5·2106318	23	5·1864166	23	5·1783578	23	5·1622599
24	5·1937762	24	5·1685082	24	5·1600991	24	5·1433012
25	5·1768319	25	5·1505110	25	5·1417515	25	5·1242537
26	5·1598006	26	5·1324269	26	5·1233170	26	5·1051194
27	5·1426840	27	5·1142574	27	5·1047972	27	5·0858996
28	5·1254831	28	5·0960037	28	5·0861931	28	5·0665956
29	5·1081983	29	5·0776661	29	5·0675051	29	5·0472077
30	5·0908299	30	5·0592448	30	5·0487334	30	5·0277361
31	5·0733773	31	5·0407394	31	5·0298777	31	5·0081805
32	5·0558399	32	5·0221492	32	5·0109370	32	4·9885399
33	5·0382162	33	5·0034726	33	4·9919101	33	4·9688131
34	5·0205045	34	4·9847080	34	4·9727952	34	4·9489982
35	5·0027024	35	4·9658532	35	4·9535899	35	4·9290930
36	4·9848074	36	4·9469053	36	4·9342917	36	4·9090949
37	4·9668161	37	4·9278612	37	4·9148972	37	4·8890005
38	4·9487250	38	4·9087173	38	4·8954029	38	4·8688063
39	4·9305300	39	4·8894694	39	4·8758046	39	4·8485081
40	4·9122263	40	4·8701129	40	4·8560977	40	4·8281013
41	4·8938090	41	4·8506427	41	4·8362772	41	4·8075808
42	4·8752725	42	4·8310534	42	4·8163374	42	4·7869412
43	4·8566108	43	4·8113388	43	4·7962725	43	4·7661764
44	4·8378174	44	4·7914926	44	4·7760760	44	4·7452799
45	4·8188855	45	4·7715079	45	4·7557408	45	4·7242448
46	4·7998075	46	4·7513771	46	4·7352597	46	4·7030638
47	4·7805757	47	4·7310925	47	4·7146247	47	4·6817288
48	4·7611817	48	4·7106456	48	4·6938274	48	4·6602317
49	4·7416166	49	4·6900277	49	4·6728591	49	4·6385635
50	4·7218713	50	4·6692295	50	4·6517106	50	4·6167150
51	4·7019358	51	4·6482412	51	4·6303719	51	4·5946765
52	4·6818002	52	4·6270527	52	4·6088330	52	4·5724376
53	4·6614535	53	4·6056532	53	4·5870831	53	4·5499879
54	4·6408847	54	4·5840316	54	4·5651111	54	4·5273160

YEARLY TABLE :—FEMALES.

Logarithms of the Series D_x; Rates of Interest 3, $3\frac{1}{4}$, $3\frac{1}{3}$, and $3\frac{1}{2}$ per Cent.

λD_x

Age (x)	3 per cent.	Age (x)	$3\frac{1}{4}$ per cent.	Age (x)	$3\frac{1}{3}$ per cent.	Age (x)	$3\frac{1}{2}$ per cent.
55	4·6194190	55	4·5615130	55	4·5422422	55	4·5037472
56	4·5973737	56	4·5384149	56	4·5187937	56	4·4795987
57	4·5747229	57	4·5147113	57	4·4947397	57	4·4548448
58	4·5514296	58	4·4903652	58	4·4700432	58	4·4294484
59	4·5274461	59	4·4653288	59	4·4446564	59	4·4033617
60	4·5027135	60	4·4395434	60	4·4185207	60	4·3765261
61	4·4771622	61	4·4129392	61	4·3915661	61	4·3488716
62	4·4507115	62	4·3854357	62	4·3637122	62	4·3203177
63	4·4232697	63	4·3569411	63	4·3348672	63	4·2907729
64	4·3947345	64	4·3273530	64	4·3049287	64	4·2601345
65	4·3649922	65	4·2965579	65	4·2737832	65	4·2282891
66	4·3339185	66	4·2644313	66	4·2413063	66	4·1951122
67	4·3013780	67	4·2308380	67	4·2073626	67	4·1604686
68	4·2672244	68	4·1956316	68	4·1718058	68	4·1242120
69	4·2313006	69	4·1586549	69	4·1344788	69	4·0861850
70	4·1934382	70	4·1197397	70	4·0952132	70	4·0462195
71	4·1534583	71	4·0787070	71	4·0538301	71	4·0041365
72	4·1111707	72	4·0353666	72	4·0101393	72	3·9597458
73	4·0663745	73	3·9895175	73	3·9639399	73	3·9128464
74	4·0188578	74	3·9409479	74	3·9150199	74	3·8632265
75	3·9683976	75	3·8894349	75	3·8631565	75	3·8106632
76	3·9147601	76	3·8347446	76	3·8081158	76	3·7549226
77	3·8577006	77	3·7766323	77	3·7496531	77	3·6957600
78	3·7969634	78	3·7148423	78	3·6875127	78	3·6329197
79	3·7322819	79	3·6491079	79	3·6214280	79	3·5661351
80	3·6633785	80	3·5791517	80	3·5511214	80	3·4951286
81	3·5899647	81	3·5046850	81	3·4763043	81	3·4196116
82	3·5117410	82	3·4254085	82	3·3966774	82	3·3392848
83	3·4283971	83	3·3410117	83	3·3119303	83	3·2538377
84	3·3396115	84	3·2511733	84	3·2217415	84	3·1629490
85	3·2450521	85	3·1555611	85	3·1257789	85	3·0662865
86	3·1443756	86	3·0538318	86	3·0236992	86	2·9635069
87	3·0372279	87	2·9456312	87	2·9151483	87	2·8542561
88	2·9232439	88	2·8305944	88	2·7997610	88	2·7381689
89	2·8020475	89	2·7083151	89	2·6771614	89	2·6148694
90	2·6732518	90	2·5784966	90	2·5469625	90	2·4839706
91	2·5364589	91	2·4406509	91	2·4087664	91	2·3450746
92	2·3912599	92	2·2943990	92	2·2621642	92	2·1977724
93	2·2372350	93	2·1393213	93	2·1067361	93	2·0416444
94	2·0739535	94	1·9749870	94	1·9420514	94	1·8762598
95	1·9009738	95	1·8009544	95	1·7676684	95	1·7011769
96	1·7178431	96	1·6167709	96	1·5831345	96	1·5159432
97	1·5240980	97	1·4219730	97	1·3879862	97	1·3200950
98	1·3192640	98	1·2160861	98	1·1817490	98	1·1131578
99	1·1028557	99	0·9986250	99	0·9639375	99	0·8946463
100	0·8743766	100	0·7690930	100	0·7340552	100	0·6640641
101	0·6333195	101	0·5269831	101	0·4915948	101	0·4209039
102	0·3791661	102	0·2717763	102	0·2360382	102	0·1646473
103	0·1113872	103	0·0029451	103	9·9668561	103	9·8947653
104	9·8294427	104	9·7199478	104	9·6835084	104	9·6107177
105	9·5327815	105	9·4222338	105	9·3854440	105	9·3119534
106	9·2208416	106	9·1092411	106	9·0721009	106	8·9979104
107	8·8930502	107	8·7803967	107	8·7429062	107	8·6680158
108	8·5488231	108	8·4351169	108	8·3972760	108	8·3216357
109	8·1875658	109	8·0728067	109	8·0346154	109	7·9583252

YEARLY TABLE:—FEMALES.

Logarithms of the Series D_x; Rates of Interest $3\frac{3}{4}$, 4, 5, and 6 per Cent.

λD_x							
Age (x)	**$3\frac{3}{4}$ per cent.**	**Age** (x)	**4 per cent.**	**Age** (x)	**5 per cent.**	**Age** (x)	**6 per cent.**
0	5·6886465	0	5·6886465	0	5·6886465	0	5·6886465
1	5·6098188	1	5·6087736	1	5·6046176	1	5·6005010
2	5·5660717	2	5·5639812	2	5·5556693	2	5·5474362
3	5·5344390	3	5·5313033	3	5·5188354	3	5·5064857
4	5·5078219	4	5·5036409	4	5·4870171	4	5·4705508
5	5·4840861	5	5·4788599	5	5·4580801	5	5·4374973
6	5·4622930	6	5·4560216	6	5·4310858	6	5·4063864
7	5·4416977	7	5·4343811	7	5·4052893	7	5·3764734
8	5·4217488	8	5·4133869	8	5·3801392	8	5·3472067
9	5·4024102	9	5·3930031	9	5·3555995	9	5·3185504
10	5·3835383	10	5·3730859	10	5·3315263	10	5·2903607
11	5·3650015	11	5·3535040	11	5·3077884	11	5·2625062
12	5·3466808	12	5·3341380	12	5·2842665	12	5·2348677
13	5·3284691	13	5·3148811	13	5·2608536	13	5·2073382
14	5·3102717	14	5·2956384	14	5·2374549	14	5·1798230
15	5·2920060	15	5·2763275	15	5·2139881	15	5·1522396
16	5·2736017	16	5·2568780	16	5·1903826	16	5·1245176
17	5·2550009	17	5·2372319	17	5·1665806	17	5·0965989
18	5·2361575	18	5·2173433	18	5·1425360	18	5·0684378
19	5·2170381	19	5·1971787	19	5·1182154	19	5·0400007
20	5·1976212	20	5·1767166	20	5·0935974	20	5·0112660
21	5·1778977	21	5·1559478	21	5·0686727	21	4·9822248
22	5·1580767	22	5·1350816	22	5·0436504	22	4·9530860
23	5·1381615	23	5·1141211	23	5·0185341	23	4·9238530
24	5·1181551	24	5·0930695	24	4·9933264	24	4·8945289
25	5·0980598	25	5·0719290	25	4·9680300	25	4·8651158
26	5·0778777	26	5·0507016	26	4·9426467	26	4·8356160
27	5·0576102	27	5·0293889	27	4·9171780	27	4·8060307
28	5·0372584	28	5·0079918	28	4·8916250	28	4·7763611
29	5·0168228	29	4·9865110	29	4·8659882	29	4·7466077
30	4·9963035	30	4·9649464	30	4·8402676	30	4·7167707
31	4·9757000	31	4·9432978	31	4·8144630	31	4·6868495
32	4·9550117	32	4·9215642	32	4·7885735	32	4·6568434
33	4·9342371	33	4·8997444	33	4·7625977	33	4·6267511
34	4·9133745	34	4·8778366	34	4·7365339	34	4·5965707
35	4·8924216	35	4·8558384	35	4·7103798	35	4·5663000
36	4·8713757	36	4·8337173	36	4·6841327	36	4·5359363
37	4·8502336	37	4·8115599	37	4·6577894	37	4·5054764
38	4·8289916	38	4·7892727	38	4·6313462	38	4·4749167
39	4·8076456	39	4·7668815	39	4·6047991	39	4·4442530
40	4·7861911	40	4·7443817	40	4·5781433	40	4·4134807
41	4·7646229	41	4·7217683	41	4·5513739	41	4·3825947
42	4·7429355	42	4·6990356	42	4·5244853	42	4·3515895
43	4·7211229	43	4·6761778	43	4·4974716	43	4·3204592
44	4·6991787	44	4·6531884	44	4·4703261	44	4·2891972
45	4·6770958	45	4·6300603	45	4·4430421	45	4·2577967
46	4·6548670	46	4·6067863	46	4·4156121	46	4·2262501
47	4·6324843	47	4·5833583	47	4·3880282	47	4·1945496
48	4·6099394	48	4·5597682	48	4·3602821	48	4·1626870
49	4·5872235	49	4·5360070	49	4·3323650	49	4·1306533
50	4·5643272	50	4·5120655	50	4·3042676	50	4·0984392
51	4·5412409	51	4·4879340	51	4·2759801	51	4·0660352
52	4·5179544	52	4·4636022	52	4·2474923	52	4·0334308
53	4·4944568	53	4·4390594	53	4·2187935	53	4·0006155
54	4·4707372	54	4·4142945	54	4·1898727	54	3·9675781

YEARLY TABLE:—FEMALES.

Logarithms of the Series D_x; Rates of Interest $3\frac{3}{4}$, 4, 5, and 6 per Cent.

λD_x							
Age (x)	$3\frac{3}{4}$ per cent.	Age (x)	4 per cent.	Age (x)	5 per cent.	Age (x)	6 per cent.
55	4·4461206	55	4·3886327	55	4·1600549	55	3·9336438
56	4·4209244	56	4·3623913	56	4·1296575	56	3·8991298
57	4·3951227	57	4·3355143	57	4·0986546	57	3·8640104
58	4·3686785	58	4·3080550	58	4·0670093	58	3·8282485
59	4·3415441	59	4·2798753	59	4·0346737	59	3·7917963
60	4·3136607	60	4·2509466	60	4·0015891	60	3·7545951
61	4·2849585	61	4·2211992	61	3·9676857	61	3·7165751
62	4·2553569	62	4·1905524	62	3·9328829	62	3·6776557
63	4·2247642	63	4·1589145	63	3·8970890	63	3·6377454
64	4·1930781	64	4·1261831	64	3·8602017	64	3·5967415
65	4·1601849	65	4·0922447	65	3·8221073	65	3·5545305
66	4·1259603	66	4·0569749	66	3·7826816	66	3·5109882
67	4·0902690	67	4·0202383	67	3·7417890	67	3·4659791
68	4·0529645	68	3·9818886	68	3·6992834	68	3·4193569
69	4·0138898	69	3·9417687	69	3·6550074	69	3·3709644
70	3·9728766	70	3·8997102	70	3·6087930	70	3·3206334
71	3·9297458	71	3·8555342	71	3·5604610	71	3·2681848
72	3·8843073	72	3·8090505	72	3·5098214	72	3·2134286
73	3·8363602	73	3·7600582	73	3·4566731	73	3·1561638
74	3·7856926	74	3·7083453	74	3·4008043	74	3·0961784
75	3·7320815	75	3·6536890	75	3·3419920	75	3·0332495
76	3·6752932	76	3·5958554	76	3·2800024	76	2·9671434
77	3·6150828	77	3·5345998	77	3·2145909	77	2·8976153
78	3·5511947	78	3·4696665	78	3·1455016	78	2·8244095
79	3·4833024	79	3·4007889	79	3·0724681	79	2·7472593
80	3·4113081	80	3·3276894	80	2·9952126	80	2·6658873
81	3·3347431	81	3·2500794	81	2·9134467	81	2·5800048
82	3·2533088	82	3·1676596	82	2·8268709	82	2·4893125
83	3·1668740	83	3·0801195	83	2·7351749	83	2·3934999
84	3·0749375	84	2·9871379	84	2·6380373	84	2·2922457
85	2·9772272	85	2·8883824	85	2·5351258	85	2·1852177
86	2·8733999	86	2·7835098	86	2·4260972	86	2·0720725
87	2·7631013	87	2·6721659	87	2·3105974	87	1·9524562
88	2·6459664	88	2·5539858	88	2·1882613	88	1·8260035
89	2·5216191	89	2·4285933	89	2·0587129	89	1·6923385
90	2·3896726	90	2·2956015	90	1·9215651	90	1·5510742
91	2·2497288	91	2·1546125	91	1·7764201	91	1·4018126
92	2·1013789	92	2·0052173	92	1·6228690	92	1·2441450
93	1·9442031	93	1·8469964	93	1·4604921	93	1·0776514
94	1·7777707	94	1·6795188	94	1·2888585	94	0·9019013
95	1·6016401	95	1·5023429	95	1·1075267	95	0·7164529
96	1·4153586	96	1·3150161	96	0·9160440	96	0·5208536
97	1·2184626	97	1·1170749	97	0·7139468	97	0·3146399
98	1·0104777	98	0·9080448	98	0·5007608	98	0·0973373
99	0·7909185	99	0·6874103	99	0·2760003	99	9·8684603
100	0·5592885	100	0·4547651	100	0·0391692	100	9·6275125
101	0·3150805	101	0·2095119	101	9·7897600	101	9·3739868
102	0·0577762	102	9·9511624	102	9·5272545	102	9·1073647
103	9·7868465	103	9·6791874	103	9·2511235	103	8·8271172
104	9·5017511	104	9·3930468	104	8·9608269	104	8·5327041
105	9·2019390	105	9·0921895	105	8·6558137	105	8·2235742
106	8·8868183	106	8·7760535	106	8·3355218	106	7·8991657
107	8·5559059	107	8·4440659	107	7·9993782	107	7·5589056
108	8·2085280	108	8·0956428	108	7·6467991	108	7·2022100
109	7·8441198	109	7·7301893	109	7·2771897	109	6·8284839

YEARLY TABLE :—FEMALES.

Logarithms of the Series D_x ; Rates of Interest 7, 8, 9, and 10 per Cent.

$\lambda\ D_x$

Age (x)	7 per cent.	Age (x)	8 per cent.	Age (x)	9 per cent.	Age (x)	10 per cent.
0	5·6886465	0	5·6886465	0	5·6886465	0	5·6886465
1	5·5964231	1	5·5923831	1	5·5883804	1	5·5844142
2	5·5392803	2	5·5312004	2	5·5231949	2	5·5152625
3	5·4942520	3	5·4821320	3	5·4701238	3	5·4582252
4	5·4542392	4	5·4380793	4	5·4220683	4	5·4062036
5	5·4171077	5	5·3969078	5	5·3768941	5	5·3570632
6	5·3819190	6	5·3576791	6	5·3336626	6	5·3098655
7	5·3479280	7	5·3196482	7	5·2916290	7	5·2638656
8	5·3145834	8	5·2822636	8	5·2502417	8	5·2185122
9	5·2818492	9	5·2454894	9	5·2094647	9	5·1737690
10	5·2495815	10	5·2091818	10	5·1691543	10	5·1294925
11	5·2176491	11	5·1732094	11	5·1291792	11	5·0855512
12	5·1859327	12	5·1374530	12	5·0894201	12	5·0418258
13	5·1543254	13	5·1018056	13	5·0497700	13	4·9982096
14	5·1227323	14	5·0661726	14	5·0101342	14	4·9546075
15	5·0910709	15	5·0304712	15	4·9704301	15	4·9109373
16	5·0592710	16	4·9946313	16	4·9305874	16	4·8671284
17	5·0272744	17	4·9585948	17	4·8905482	17	4·8231230
18	4·9950354	18	4·9223158	18	4·8502665	18	4·7788751
19	4·9625203	19	4·8857608	19	4·8097087	19	4·7343511
20	4·9297078	20	4·8489082	20	4·7688534	20	4·6895296
21	4·8965886	21	4·8117491	21	4·7276915	21	4·6444015
22	4·8633719	22	4·7744924	22	4·6864321	22	4·5991759
23	4·8300611	23	4·7371416	23	4·6450785	23	4·5538562
24	4·7966590	24	4·6996995	24	4·6036337	24	4·5084452
25	4·7631680	25	4·6621686	25	4·5621000	25	4·4629453
26	4·7295902	26	4·6245508	26	4·5204795	26	4·4173586
27	4·6959271	27	4·5868477	27	4·4787736	27	4·3716866
28	4·6621796	28	4·5490602	28	4·4369834	28	4·3259302
29	4·6283183	29	4·5111889	29	4·3951094	29	4·2800900
30	4·5944333	30	4·4732340	30	4·3531517	30	4·2341661
31	4·5604342	31	4·4351949	31	4·3111099	31	4·1881581
32	4·5263502	32	4·3970709	32	4·2689832	32	4·1420652
33	4·4921799	33	4·3588607	33	4·2267702	33	4·0958860
34	4·4579217	34	4·3205624	34	4·1844692	34	4·0496188
35	4·4235731	35	4·2821739	35	4·1420779	35	4·0032613
36	4·3891315	36	4·2436923	36	4·0995936	36	3·9568108
37	4·3545937	37	4·2051145	37	4·0570131	37	3·9102641
38	4·3199560	38	4·1664369	38	4·0143327	38	3·8636176
39	4·2852144	39	4·1276553	39	3·9715483	39	3·8168670
40	4·2503642	40	4·0887651	40	3·9286554	40	3·7700079
41	4·2154003	41	4·0497612	41	3·8856488	41	3·7230351
42	4·1803172	42	4·0106382	42	3·8425230	42	3·6759431
43	4·1451090	43	3·9713899	43	3·7992721	43	3·6287260
44	4·1097691	44	3·9320101	44	3·7558895	44	3·5813772
45	4·0742906	45	3·8924916	45	3·7123683	45	3·5338898
46	4·0386661	46	3·8528271	46	3·6687011	46	3·4862564
47	4·0028877	47	3·8130088	47	3·6248800	47	3·4384691
48	3·9669472	48	3·7730282	48	3·5808967	48	3·3905196
49	3·9308355	49	3·7328766	49	3·5367424	49	3·3423991
50	3·8945436	50	3·6925447	50	3·4924077	50	3·2940983
51	3·8580617	51	3·6520228	51	3·4478831	51	3·2456074
52	3·8213794	52	3·6113006	52	3·4031581	52	3·1969162
53	3·7844862	53	3·5703674	53	3·3582222	53	3·1480141
54	3·7473709	54	3·5292121	54	3·3130642	54	3·0988899

YEARLY TABLE:—FEMALES.

Logarithms of the Series D_x; Rates of Interest 7, 8, 9, and 10 per Cent.

λD_x							
Age (x)	7 per cent.	Age (x)	8 per cent.	Age (x)	9 per cent.	Age (x)	10 per cent.
55	3·7093586	55	3·4871598	55	3·2670092	55	3·0488687
56	3·6707667	56	3·4445280	56	3·2203746	56	2·9982079
57	3·6315694	57	3·4012906	57	3·1731345	57	2·9470016
58	3·5917295	58	3·3574108	58	3·1252520	58	2·8952129
59	3·5511995	59	3·3128408	59	3·0766792	59	2·8426739
60	3·5099203	60	3·2675217	60	3·0273573	60	2·7893859
61	3·4678225	61	3·2213838	61	2·9772167	61	2·7352791
62	3·4248252	62	3·1743466	62	2·9261767	62	2·6802729
63	3·3808369	63	3·1263183	63	2·8741457	63	2·6242757
64	3·3357551	64	3·0771965	64	2·8210212	64	2·5671850
65	3·2894662	65	3·0268677	65	2·7666896	65	2·5088872
66	3·2418460	66	2·9752074	66	2·7110266	66	2·4492581
67	3·1927589	67	2·9220804	67	2·6538969	67	2·3881621
68	3·1420588	68	2·8673403	68	2·5951540	68	2·3254531
69	3·0895884	69	2·8108299	69	2·5346409	69	2·2609738
70	3·0351795	70	2·7523811	70	2·4721893	70	2·1945560
71	2·9786531	71	2·6918146	71	2·4076201	71	2·1260206
72	2·9198189	72	2·6289405	72	2·3407433	72	2·0551776
73	2·8584762	73	2·5635578	73	2·2713578	73	1·9818259
74	2·7944128	74	2·4954545	74	2·1992517	74	1·9057537
75	2·7274061	75	2·4244077	75	2·1242023	75	1·8267380
76	2·6572221	76	2·3501837	76	2·0459755	76	1·7445451
77	2·5836160	77	2·2725377	77	1·9643268	77	1·6589302
78	2·5063323	78	2·1912140	78	1·8790003	78	1·5696375
79	2·4251042	79	2·1059460	79	1·7897295	79	1·4764006
80	2·3396543	80	2·0164561	80	1·6962369	80	1·3789417
81	2·2496939	81	1·9224557	81	1·5982338	81	1·2769724
82	2·1549237	82	1·8236455	82	1·4954208	82	1·1701932
83	2·0550332	83	1·7197150	83	1·3874876	83	1·0582938
84	1·9497011	84	1·6103429	84	1·2741128	84	0·9409528
85	1·8385951	85	1·4951970	85	1·1549641	85	0·8178380
86	1·7213721	86	1·3739340	86	1·0296983	86	0·6886060
87	1·5976778	87	1·2461997	87	0·8979613	87	0·5529029
88	1·4671472	88	1·1116292	88	0·7593880	88	0·4103634
89	1·3294043	89	0·9698463	89	0·6136024	89	0·2606115
90	1·1840621	90	0·8204641	90	0·4602174	90	0·1032604
91	1·0307226	91	0·6630846	91	0·2988352	91	9·9379120
92	0·8689770	92	0·4972991	92	0·1290469	92	9·7641575
93	0·6984056	93	0·3226877	93	9·9504328	93	9·5815772
94	0·5185775	94	0·1388196	94	9·7625620	94	9·3897402
95	0·3290512	95	9·9452533	95	9·5649930	95	9·1882050
96	0·1293740	96	9·7415362	96	9·3572731	96	8·9765189
97	9·9190824	97	9·5272046	97	9·1389387	97	8·7542184
98	9·6977019	98	9·3017840	98	8·9095155	98	8·5208289
99	9·4647469	99	9·0647891	99	8·6685178	99	8·2758651
100	9·2197213	100	8·8157235	100	8·4154495	100	8·0188305
101	8·9621176	101	8·5540799	101	8·1498031	101	7·7492180
102	8·6914177	102	8·2793399	102	7·8710604	102	7·4665091
103	8·4070922	103	7·9909745	103	7·5786922	103	7·1701747
104	8·1086012	104	7·6884435	104	7·2721585	104	6·8596748
105	7·7953934	105	7·3711958	105	6·9509080	105	6·5344582
106	7·4669070	106	7·0386694	106	6·6143789	106	6·1939628
107	7·1225690	107	6·6902914	107	6·2619981	107	5·8376159
108	6·7617954	108	6·3254778	108	5·8931818	108	5·4648334
109	6·3839915	109	5·9430339	109	5·5073352	109	5·0750206

YEARLY TABLE:—FEMALES. Interest 3 per Cent.

Age (x)	D_x	N_x	S_x	C_x	M_x	R_x	Age (x)
0	488,255	9,691,956	205,605,825	63,858·26	205,965·03	3,703,432·41	0
1	410,175	9,203,701	195,913,869	24,657·37	142,106·77	3,497,467·38	1
2	373,571	8,793,526	186,710,168	12,833·03	117,449·40	3,355,360·61	2
3	349,858	8,419,955	177,916,642	8,212·29	104,616·37	3,237,911·21	3
4	331,456	8,070,097	169,496,687	5,689·77	96,404·08	3,133,294·84	4
5	316,112	7,738,641	161,426,590	4,075·20	90,714·31	3,036,890·76	5
6	302,830	7,422,529	153,687,949	3,101·94	86,639·11	2,946,176·45	6
7	290,907	7,119,699	146,265,420	2,564·79	83,537·17	2,859,537·34	7
8	279,870	6,828,792	139,145,721	2,087·72	80,972·38	2,776,000·17	8
9	269,630	6,548,922	132,316,929	1,732·25	78,884·66	2,695,027·79	9
10	260,044	6,279,292	125,768,007	1,477·35	77,152·41	2,616,143·13	10
11	250,993	6,019,248	119,488,715	1,305·27	75,675·06	2,538,990·72	11
12	242,377	5,768,255	113,469,467	1,201·88	74,369·79	2,463,315·66	12
13	234,116	5,525,878	107,701,212	1,153·65	73,167·91	2,388,945·87	13
14	226,143	5,291,762	102,175,334	1,148·29	72,014·26	2,315,777·96	14
15	218,408	5,065,619	96,883,572	1,176·54	70,865·97	2,243,763·70	15
16	210,870	4,847,211	91,817,953	1,227·58	69,689·43	2,172,897·73	16
17	203,501	4,636,341	86,970,742	1,295·21	68,461·85	2,103,208·30	17
18	196,279	4,432,840	82,334,401	1,368·69	67,166·64	2,034,746·45	18
19	189,193	4,236,561	77,901,561	1,444·54	65,797·95	1,967,579·81	19
20	182,238	4,047,368	73,665,000	1,515·35	64,353·41	1,901,781·86	20
21	175,415	3,865,130	69,617,632	1,496·27	62,838·06	1,837,428·45	21
22	168,809	3,689,715	65,752,502	1,475·49	61,341·79	1,774,590·39	22
23	162,417	3,520,906	62,062,787	1,452·19	59,866·30	1,713,248·60	23
24	156,234	3,358,489	58,541,881	1,427·56	58,414·11	1,653,382·30	24
25	150,256	3,202,255	55,183,392	1,402·21	56,986·55	1,594,968·19	25
26	144,478	3,051,999	51,981,137	1,375·33	55,584·34	1,537,981·64	26
27	138,894	2,907,521	48,929,138	1,347·94	54,209·01	1,482,397·30	27
28	133,501	2,768,627	46,021,617	1,320·57	52,861·07	1,428,188·29	28
29	128,292	2,635,126	43,252,990	1,292·81	51,540·50	1,375,327·22	29
30	123,262	2,506,834	40,617,864	1,265·16	50,247·69	1,323,786·72	30
31	118,407	2,383,572	38,111,030	1,237·63	48,982·53	1,273,539·03	31
32	113,721	2,265,165	35,727,458	1,209·88	47,744·90	1,224,556·50	32
33	109,198	2,151,444	33,462,293	1,183·42	46,535·02	1,176,811·60	33
34	104,835	2,042,246	31,310,849	1,156·77	45,351·60	1,130,276·58	34
35	100,624	1,937,411	29,268,603	1,131·36	44,194·83	1,084,924·98	35
36	96,562	1,836,787	27,331,192	1,105·78	43,063·47	1,040,730·15	36
37	92,644	1,740,225	25,494,405	1,081·70	41,957·69	997,666·68	37
38	88,864	1,647,581	23,754,180	1,057·77	40,875·99	955,708·99	38
39	85,218	1,558,717	22,106,599	1,034·94	39,818·22	914,833·00	39
40	81,701	1,473,499	20,547,882	1,012·53	38,783·28	875,014·78	40
41	78,309	1,391,798	19,074,383	991·42	37,770·75	836,231·50	41
42	75,036	1,313,489	17,682,585	970·40	36,779·33	798,460·75	42
43	71,880	1,238,453	16,369,096	950·58	35,808·93	761,681·42	43
44	68,836	1,166,573	15,130,643	931·35	34,858·35	725,872·49	44
45	65,900	1,097,737	13,964,070	912·70	33,927·00	691,014·14	45
46	63,068	1,031,837	12,866,333	895·09	33,014·30	657,087·14	46
47	60,336	968,769	11,834,496	877·73	32,119·21	624,072·84	47
48	57,701	908,433	10,865,727	861·09	31,241·48	591,953·63	48
49	55,159	850,732	9,957,294	845·14	30,380·39	560,712·15	49
50	52,707	795,573	9,106,562	829·60	29,535·25	530,331·76	50
51	50,343	742,866	8,310,989	814·47	28,705·65	500,796·51	51
52	48,062	692,523	7,568,123	799·93	27,891·18	472,090·86	52
53	45,862	644,461	6,875,600	785·55	27,091·25	444,199·68	53
54	43,741	598,599	6,231,139	835·47	26,305·70	417,108·43	54

YEARLY TABLE:—Females. Interest 3 per Cent.

Age (x)	D_x	N_x	S_x	C_x	M_x	R_x	Age (x)
55	41,631	554,858	5,632,540	848·01	25,470·23	390,802·73	55
56	39,571	513,227	5,077,682	858·36	24,622·22	365,332·50	56
57	37,560	473,656	4,564,455	867·40	23,763·86	340,710·28	57
58	35,598	436,096	4,090,799	875·70	22,896·46	316,946·42	58
59	33,686	400,498	3,654,703	883·63	22,020·76	294,049·96	59
60	31,821	366,812	3,254,205	891·35	21,137·13	272,029·20	60
61	30,003	334,991	2,887,393	898·98	20,245·78	250,892·07	61
62	28,230	304,988	2,552,402	906·35	19,346·80	230,646·29	62
63	26,501	276,758	2,247,414	913·43	18,440·45	211,299·49	63
64	24,816	250,257	1,970,656	919·77	17,527·02	192,859·04	64
65	23,174	225,441	1,720,399	925·25	16,607·25	175,332·02	65
66	21,573	202,267	1,494,958	928·94	15,682·00	158,724·77	66
67	20,016	180,694	1,292,691	930·82	14,753·06	143,042·77	67
68	18,502	160,678	1,111,997	929·99	13,822·24	128,289·71	68
69	17,033	142,176	951,319	926·01	12,892·25	114,467·47	69
70	15,611	125,143	809,143	918·29	11,966·24	101,575·22	70
71	14,238	109,532	684,000	906·31	11,047·95	89,608·98	71
72	12,917	95,294	574,468	889·73	10,141·64	78,561·03	72
73	11,651	82,377	479,174	868·08	9,251·91	68,419·39	73
74	10,444	70,726	396,797	841·49	8,383·83	59,167·48	74
75	9,298·2	60,281·5	326,070·7	809·47	7,542·34	50,783·65	75
76	8,217·9	50,983·3	265,789·2	772·34	6,732·87	43,241·31	76
77	7,206·1	42,765·4	214,805·9	730·70	5,960·53	36,508·44	77
78	6,265·6	35,559·3	172,040·5	684·45	5,229·83	30,547·91	78
79	5,398·6	29,293·7	136,481·2	634·82	4,545·38	25,318·08	79
80	4,606·6	23,895·1	107,187·5	582·29	3,910·56	20,772·70	80
81	3,890·1	19,288·5	83,292·4	527·86	3,328·27	16,862·14	81
82	3,248·9	15,398·4	64,003·9	472·67	2,800·41	13,533·87	82
83	2,681·6	12,149·5	48,605·5	417·74	2,327·74	10,733·46	83
84	2,185·8	9,467·9	36,456·0	363·98	1,910·00	8,405·72	84
85	1,758·1	7,282·1	26,988·1	312·61	1,546·02	6,495·72	85
86	1,394·4	5,524·0	19,706·0	264·23	1,233·41	4,949·70	86
87	1,089·5	4,129·6	14,182·0	219·74	969·18	3,716·29	87
88	838·00	3,040·10	10,052·37	179·63	749·44	2,747·11	88
89	633·94	2,202·10	7,012·27	144·26	569·81	1,997·67	89
90	471·25	1,568·16	4,810·17	113·58	425·55	1,427·86	90
91	343·92	1,096·91	3,242·01	87·73	311·97	1,002·31	91
92	246·18	752·99	2,145·10	66·36	224·24	690·34	92
93	172·68	506·81	1,392·11	49·08	157·88	466·10	93
94	118·56	334·13	885·30	35·47	108·80	308·22	94
95	79·611	215·574	551·173	25·07	73·33	199·42	95
96	52·221	135·963	335·599	17·28	48·26	126·09	96
97	33·427	83·742	199·636	11·59	30·98	77·83	97
98	20·858	50·315	115·894	7·61	19·39	46·85	98
99	12·672	29·457	65·579	4·79	11·78	27·46	99
100	7·4882	16·7848	36·1217	2·98	6·99	15·68	100
101	4·2985	9·2966	19·3369	1·77	4·01	8·69	101
102	2·3942	4·9981	10·0403	1·05	2·24	4·68	102
103	1·2924	2·6039	5·0422	·55	1·19	2·44	103
104	·6752	1·3115	2·4383	·31	·64	1·25	104
105	·3410	·6363	1·1268	·17	·33	·61	105
106	·1663	·2953	·4905	·08	·16	·28	106
107	·0782	·1290	·1952	·04	·08	·12	107
108	·0354	·0508	·0662	·04	·04	·04	108
109	·0154	·0154	·0154	...	...	...	109

YEARLY TABLE:—FEMALES. Interest 3 per Cent.

Age (x)	λ D_x	λ N_x	λ M_x	Age (x)	λ D_x	λ N_x	λ M_x
0	5·6886465	6·9864115	5·3137936	55	4·6194190	5·7441818	4·4060328
1	5·6129697	6·9639626	5·1526148	56	4·5973737	5·7103095	4·3913272
2	5·5723735	6·9441631	5·0698509	57	4·5747229	5·6754630	4·3759170
3	5·5438916	6·9253098	5·0195996	58	4·5514296	5·6395821	4·3597683
4	5·5204254	6·9068788	4·9840955	59	4·5274461	5·6026003	4·3428323
5	5·4998405	6·8886647	4·9576758	60	4·5027135	5·5644436	4·3250460
6	5·4811983	6·8705519	4·9377140	61	4·4771622	5·5250331	4·3063345
7	5·4637539	6·8524617	4·9218798	62	4·4507115	5·4842828	4·2866091
8	5·4469558	6·8343439	4·9083369	63	4·4232697	5·4421002	4·2657715
9	5·4307681	6·8161698	4·8969925	64	4·3947345	5·3983862	4·2437081
10	5·4150471	6·7979106	4·8873495	65	4·3649922	5·3530329	4·2202977
11	5·3996612	6·7795423	4·8789528	66	4·3339185	5·3059251	4·1954014
12	5·3844914	6·7610445	4·8713965	67	4·3013780	5·2569437	4·1688821
13	5·3694305	6·7424013	4·8643207	68	4·2672244	5·2059564	4·1405785
14	5·3543840	6·7236003	4·8574185	69	4·2313006	5·1528263	4·1103287
15	5·3392692	6·7046326	4·8504377	70	4·1934382	5·0974066	4·0779578
16	5·3240158	6·6854919	4·8431669	71	4·1534583	5·0395410	4·0432818
17	5·3085658	6·6661754	4·8354486	72	4·1111707	4·9790656	4·0061082
18	5·2928734	6·6466820	4·8271537	73	4·0663745	4·9158060	3·9662314
19	5·2769048	6·6270135	4·8182123	74	4·0188578	4·8495791	3·9234425
20	5·2606388	6·6071727	4·8085716	75	3·9683976	4·7801841	3·8775061
21	5·2440662	6·5871641	4·7982228	76	3·9147601	4·7074280	3·8282003
22	5·2273961	6·5669929	4·7877564	77	3·8577006	4·6310925	3·7752849
23	5·2106318	6·5466544	4·7771824	78	3·7969634	4·5509532	3·7184876
24	5·1937762	6·5261440	4·7665178	79	3·7322819	4·4667743	3·6575702
25	5·1768319	6·5054560	4·7557724	80	3·6633785	4·3783088	3·5922390
26	5·1598006	6·4845844	4·7449524	81	3·5899647	4·2852985	3·5222186
27	5·1426840	6·4635229	4·7340715	82	3·5117410	4·1874756	3·4472217
28	5·1254831	6·4422644	4·7231360	83	3·4283971	4·0845585	3·3669345
29	5·1081983	6·4208014	4·7121486	84	3·3396115	3·9762537	3·2810334
30	5·0908299	6·3991256	4·7011161	85	3·2450521	3·8622566	3·1892151
31	5·0733773	6·3772283	4·6900413	86	3·1443756	3·7422537	3·0911074
32	5·0558399	6·3550999	4·6789270	87	3·0372279	3·6159080	2·9864044
33	5·0382162	6·3327301	4·6677799	88	2·9232439	3·4828879	2·8747369
34	5·0205045	6·3101081	4·6565926	89	2·8020475	3·3428370	2·7557301
35	5·0027024	6·2872217	4·6453714	90	2·6732518	3·1953904	2·6289506
36	4·9848074	6·2640589	4·6341090	91	2·5364589	3·0401710	2·4941128
37	4·9668161	6·2406055	4·6228115	92	2·3912599	2·8767892	2·3507131
38	4·9487250	6·2168468	4·6114683	93	2·2372350	2·7048452	2·1983271
39	4·9305300	6·1927673	4·6000818	94	2·0739535	2·5239155	2·0366289
40	4·9122263	6·1683499	4·5886445	95	1·9009738	2·3335964	1·8652817
41	4·8938090	6·1435762	4·5771557	96	1·7178431	2·1334208	1·6835873
42	4·8752725	6·1184265	4·5656038	97	1·5240980	1·9229433	1·4910814
43	4·8566108	6·0928796	4·5539914	98	1·3192640	1·7016975	1·2875778
44	4·8378174	6·0669119	4·5423068	99	1·1028557	1·4691885	1·0711453
45	4·8188855	6·0404984	4·5305455	100	0·8743766	1·2249161	0·8444772
46	4·7998075	6·0136111	4·5187021	101	0·6333195	0·9683241	0·6031444
47	4·7805757	5·9862203	4·5067648	102	0·3791661	0·6988049	0·3502480
48	4·7611817	5·9582929	4·4947316	103	0·1113872	0·4156243	0·0755470
49	4·7416166	5·9297927	4·4825934	104	$\bar{1}$·8294427	0·1177683	$\bar{1}$·8061800
50	4·7218713	5·9006801	4·4703406	105	$\bar{1}$·5327815	$\bar{1}$·8036619	$\bar{1}$·5185139
51	4·7019358	5·8709105	4·4579675	106	$\bar{1}$·2208416	$\bar{1}$·4702634	$\bar{1}$·2041200
52	4·6818002	5·8404342	4·4454670	107	$\bar{2}$·8930502	$\bar{1}$·1105897	$\bar{2}$·9030900
53	4·6614535	5·8091967	4·4328290	108	$\bar{2}$·5488231	$\bar{2}$·7058637	$\bar{2}$·6020600
54	4·6408847	5·7771360	4·4200499	109	$\bar{2}$·1875658	$\bar{2}$·1875207	...

YEARLY TABLE:—FEMALES. Interest 3 per Cent.

Age (x)	$\lambda\left(\frac{N_x}{D_x}\right)=\lambda A_x$	$\lambda\left(\frac{M_x}{D_x}\right)=\lambda \Pi_x$	$\lambda\left(\frac{M_x}{N_x}\right)=\lambda \pi_x$	Age (x)	$\lambda\left(\frac{N_x}{D_x}\right)=\lambda A_x$	$\lambda\left(\frac{M_x}{D_x}\right)=\lambda \Pi_x$	$\lambda\left(\frac{M_x}{N_x}\right)=\lambda \pi_x$
0	1·2977650	$\bar{1}$·6251471	$\bar{2}$·3273821	50	1·1788088	$\bar{1}$·7484693	$\bar{2}$·5696605
1	1·3509929	$\bar{1}$·5396451	$\bar{2}$·1886522	51	1·1689747	$\bar{1}$·7560317	$\bar{2}$·5870570
2	1·3717896	$\bar{1}$·4974774	$\bar{2}$·1256878	52	1·1586340	$\bar{1}$·7636668	$\bar{2}$·6050328
3	1·3814182	$\bar{1}$·4757080	$\bar{2}$·0942898	53	1·1477432	$\bar{1}$·7713755	$\bar{2}$·6236323
4	1·3864534	$\bar{1}$·4636701	$\bar{2}$·0772167	54	1·1362513	$\bar{1}$·7791652	$\bar{2}$·6429139
5	1·3888242	$\bar{1}$·4578353	$\bar{2}$·0690111	55	1·1247628	$\bar{1}$·7866138	$\bar{2}$·6618510
6	1·3893536	$\bar{1}$·4565157	$\bar{2}$·0671621	56	1·1129358	$\bar{1}$·7939535	$\bar{2}$·6810177
7	1·3887078	$\bar{1}$·4581259	$\bar{2}$·0694181	57	1·1007401	$\bar{1}$·8011941	$\bar{2}$·7004540
8	1·3873881	$\bar{1}$·4613811	$\bar{2}$·0739930	58	1·0881525	$\bar{1}$·8083387	$\bar{2}$·7201862
9	1·3854017	$\bar{1}$·4662244	$\bar{2}$·0808227	59	1·0751542	$\bar{1}$·8153862	$\bar{2}$·7402320
10	1·3828635	$\bar{1}$·4723024	$\bar{2}$·0894389	60	1·0617301	$\bar{1}$·8223325	$\bar{2}$·7606024
11	1·3798811	$\bar{1}$·4792916	$\bar{2}$·0994105	61	1·0478709	$\bar{1}$·8291723	$\bar{2}$·7813014
12	1·3765531	$\bar{1}$·4869051	$\bar{2}$·1103520	62	1·0335713	$\bar{1}$·8358976	$\bar{2}$·8023263
13	1·3729708	$\bar{1}$·4948902	$\bar{2}$·1219194	63	1·0188305	$\bar{1}$·8425018	$\bar{2}$·8236713
14	1·3692163	$\bar{1}$·5030345	$\bar{2}$·1338182	64	1·0036517	$\bar{1}$·8489736	$\bar{2}$·8453219
15	1·3653634	$\bar{1}$·5111685	$\bar{2}$·1458051	65	0·9880407	$\bar{1}$·8553055	$\bar{2}$·8672648
16	1·3614761	$\bar{1}$·5191511	$\bar{2}$·1576750	66	0·9720066	$\bar{1}$·8614829	$\bar{2}$·8894763
17	1·3576096	$\bar{1}$·5268828	$\bar{2}$·1692732	67	0·9555657	$\bar{1}$ 8675041	$\bar{2}$·9119384
18	1·3538086	$\bar{1}$·5342803	$\bar{2}$·1804717	68	0·9387320	$\bar{1}$·8733541	$\bar{2}$·9346221
19	1·3501087	$\bar{1}$·5413075	$\bar{2}$·1911988	69	0·9215257	$\bar{1}$·8790281	$\bar{2}$·9575024
20	1·3465339	$\bar{1}$·5479328	$\bar{2}$·2013989	70	0·9039684	$\bar{1}$·8845196	$\bar{2}$·9805512
21	1·3430979	$\bar{1}$·5541566	$\bar{2}$·2110587	71	0·8860827	$\bar{1}$·8898235	$\bar{1}$·0037408
22	1·3395968	$\bar{1}$·5603603	$\bar{2}$·2207635	72	0·8678949	$\bar{1}$·8949375	$\bar{1}$·0270426
23	1·3360226	$\bar{1}$·5665506	$\bar{2}$·2305280	73	0·8494315	$\bar{1}$·8998569	$\bar{1}$·0504254
24	1·3323678	$\bar{1}$·5727416	$\bar{2}$·2403738	74	0·8307213	$\bar{1}$·9045847	$\bar{1}$·0738634
25	1·3286241	$\bar{1}$·5789405	$\bar{2}$·2503164	75	0·8117865	$\bar{1}$·9091085	$\bar{1}$·0973220
26	1·3247838	$\bar{1}$·5851518	$\bar{2}$·2603680	76	0·7926679	$\bar{1}$·9134402	$\bar{1}$·1207723
27	1·3208389	$\bar{1}$·5913875	$\bar{2}$·2705486	77	0·7733919	$\bar{1}$·9175843	$\bar{1}$·1441924
28	1·3167813	$\bar{1}$·5976529	$\bar{2}$·2808716	78	0·7539898	$\bar{1}$·9215242	$\bar{1}$·1675344
29	1·3126031	$\bar{1}$·6039503	$\bar{2}$·2913472	79	0·7344924	$\bar{1}$·9252883	$\bar{1}$·1907959
30	1·3082957	$\bar{1}$·6102862	$\bar{2}$·3019905	80	0·7149303	$\bar{1}$·9288605	$\bar{1}$·2139302
31	1·3038510	$\bar{1}$·6166640	$\bar{2}$·3128130	81	0·6953338	$\bar{1}$·9322539	$\bar{1}$·2369201
32	1·2992600	$\bar{1}$·6230871	$\bar{2}$·3238271	82	0·6757346	$\bar{1}$·9354807	$\bar{1}$·2597461
33	1·2945139	$\bar{1}$·6295637	$\bar{2}$·3350498	83	0·6561614	$\bar{1}$·9385374	$\bar{1}$·2823760
34	1·2896036	$\bar{1}$·6360881	$\bar{2}$·3464845	84	0·6366422	$\bar{1}$·9414219	$\bar{1}$·3047797
35	1·2845193	$\bar{1}$·6426690	$\bar{2}$·3581497	85	0·6172045	$\bar{1}$·9441630	$\bar{1}$·3269585
36	1·2792515	$\bar{1}$·6493016	$\bar{2}$·3700501	86	0·5978781	$\bar{1}$·9467318	$\bar{1}$·3488537
37	1·2737894	$\bar{1}$·6559954	$\bar{2}$·3822060	87	0·5786801	$\bar{1}$·9491765	$\bar{1}$·3704964
38	1·2681218	$\bar{1}$·6627433	$\bar{2}$·3946215	88	0·5596440	$\bar{1}$·9514930	$\bar{1}$·3918490
39	1·2622373	$\bar{1}$·6695518	$\bar{2}$·4073145	89	0·5407895	$\bar{1}$·9536826	$\bar{1}$·4128931
40	1·2561236	$\bar{1}$·6764182	$\bar{2}$·4202946	90	0·5221386	$\bar{1}$·9556988	$\bar{1}$·4335602
41	1·2497672	$\bar{1}$·6833467	$\bar{2}$·4335795	91	0·5037121	$\bar{1}$·9576539	$\bar{1}$·4539418
42	1·2431540	$\bar{1}$·6903313	$\bar{2}$·4471773	92	0·4855293	$\bar{1}$·9594532	$\bar{1}$·4739239
43	1·2362688	$\bar{1}$ 6973806	$\bar{2}$·4611118	93	0·4676102	$\bar{1}$·9610921	$\bar{1}$·4934819
44	1·2290945	$\bar{1}$·7044894	$\bar{2}$·4753949	94	0·4499620	$\bar{1}$·9626754	$\bar{1}$·5127134
45	1·2216129	$\bar{1}$·7116600	$\bar{2}$·4900471	95	0·4326226	$\bar{1}$:9643079	$\bar{1}$·5316853
46	1·2138036	$\bar{1}$·7188946	$\bar{2}$·5050910	96	0·4155777	$\bar{1}$·9657442	$\bar{1}$·5501665
47	1·2056446	$\bar{1}$·7261891	$\bar{2}$·5205445	97	0·3988453	$\bar{1}$·9669834	$\bar{1}$·5681381
48	1·1971112	$\bar{1}$·7335499	$\bar{2}$·5364387	98	0·3824335	$\bar{1}$·9683138	$\bar{1}$·5858803
49	1·1881761	$\bar{1}$·7409768	$\bar{2}$·5528007	99	0·3663328	$\bar{1}$·9682896	$\bar{1}$·6019568
				100	0·3505395	$\bar{1}$·9701006	$\bar{1}$·6195611

ENGLISH LIFE TABLE, No. 3.

YEARLY TABLE:—FEMALES. Interest 3 per Cent.

VALUES OF ANNUITIES. SINGLE and ANNUAL PREMIUMS, which insure £1 on the LIFE of a FEMALE.

Age	**Present** value of an **Annuity** of £1 (first payment at the age x).	**Annuity** (first payment at age x) which £1 will purchase.	Sum which **One Premium** of £1 will insure over **One Year.**	Sum which **One Premium** of £1 will insure over the **Whole Term of Life.**	Sum which an **Annual Premium** of £1 will insure over the **Whole Term of Life.**	**Single Premium** which will insure £1 over **One Year.**	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Annual Premium** which will insure £1 over the **Whole Term of Life.**
x	$\frac{N_x}{D_x}=A_x$	$\frac{D_x}{N_x}=a_x$	$\frac{D_x}{C_x}$	$\frac{D_x}{M_x}=\Sigma_x$	$\frac{N_x}{M_x}=s_x$	$\frac{C_x}{D_x}$	$\frac{M_x}{D_x}=\Pi_x$	$\frac{M_x}{N_x}=\pi_x$
	£	£	£	£	£	£	£	£
0	19·8502	·050377	7·65	2·37057	47·0563	·130789	·42184	·021251
1	22·4585	·044566	16·64	2·88639	64·7661	·060114	·34645	·015440
2	23·5391	·042483	29·11	3·18070	74·8708	·034352	·31440	·013356
3	24·0668	·041551	42·60	3·34420	80·4841	·023473	·29903	·012425
4	24·3474	·041072	58·25	3·43819	83·7112	·017166	·29085	·011946
5	24·4807	·040848	77·57	3·48469	85·3078	·012892	·28697	·011722
6	24·5106	·040799	97·63	3·49530	85·6718	·010243	·28610	·011672
7	24·4742	·040859	113·42	3·48236	85·2279	·008817	·28716	·011733
8	24·3999	·040984	134·06	3·45636	84·3348	·007460	·28932	·011857
9	24·2886	·041172	155·65	3·41803	83·0190	·006425	·29257	·012045
10	24·1470	041413	176·02	3·37053	81·3881	·005681	·29669	·012287
11	23·9818	·041698	192·29	3·31672	79·5407	·005200	·30150	·012572
12	23·7987	·042019	201·67	3·25908	77·5618	·004959	·30684	·012893
13	23·6032	·042367	202·93	3·19970	75·5232	·004928	·31253	·013241
14	23·4000	·042735	196·94	3·14026	73·4821	·005078	·31845	·013609
15	23·1933	·043116	185·64	3·08199	71·4817	·005387	·32447	·013990
16	22·9867	·043503	171·78	3·02586	69·5545	·005821	·33048	·014377
17	22·7829	·043893	157·12	2·97247	67·7215	·006365	·33642	·014766
18	22·5844	·044278	143·41	2·92227	65·9976	·006973	·34220	·015152
19	22·3928	·044657	130·97	2·87536	64·3874	·007635	·34778	·015531
20	22·2093	·045026	120·26	2·83183	62·8928	·008315	·35313	·015900
21	22·0342	·045384	117·24	2·79154	61·5094	·008530	·35823	·016258
22	21·8573	·045751	114·41	2·75195	60·1501	·008741	·36338	·016625
23	21·6782	·046129	111·84	2·71300	58·8128	·008941	·36860	·017003
24	21·4965	·046519	109·44	2·67460	57·4945	·009137	·37389	·017393
25	21·3120	·046922	107·16	2·63669	56·1932	·009332	·37926	·017796
26	21·1244	·047339	105·05	2·59925	54·9075	·009519	·38473	·018212
27	20·9334	·047771	103·04	2·56220	53·6354	·009705	·39029	·018644
28	20·7387	·048219	101·09	2·52550	52·3755	·009892	·39596	·019093
29	20·5401	·048685	99·23	2·48914	51·1273	·010077	·40174	·019559
30	20·3374	·049170	97·43	2·45309	49·8895	·010264	·40765	·020044
31	20·1303	·049676	95·67	2·41733	48·6617	·010452	·41368	·020550
32	19·9187	·050204	93·99	2·38184	47·4431	·010639	·41984	·021078
33	19·7022	·050756	92·27	2·34658	46·2328	·010837	·42615	·021630
34	19·4807	·051333	90·63	2·31160	45·0314	·011034	·43260	·022207
35	19·2539	·051937	88 94	2·27683	43·8380	·011243	·43921	·022811
36	19·0218	·052571	87·33	2·24232	42·6530	·011451	·44597	·023445
37	18·7841	·053237	85·65	2·20803	41·4757	·011676	·45289	·024110
38	18·5405	·053936	84·01	2·17399	40·3068	·011903	·45998	·024810
39	18·2910	·054672	82·34	2·14017	39·1458	·012145	·46725	·025545
40	18·0353	·055447	80·69	2·10660	37·9932	·012393	·47470	·026321
41	17·7733	·056264	78·99	2·07326	36·8486	·012660	·48233	·027138
42	17·5047	·057128	77·33	2·04018	35·7127	·012932	·49015	·028001
43	17·2293	·058041	75·62	2·00733	34·5850	·013224	·49817	·028914
44	16·9471	·059007	73·91	1·97474	33·4661	·013530	·50640	·029881
45	16·6576	·060033	72·20	1·94241	32·3559	·013850	·51483	·030906
46	16·3608	·061122	70·46	1·91032	31·2542	·014192	·52347	·031996
47	16·0563	·062281	68·74	1·87850	30·1617	·014547	·53234	·033155
48	15·7439	·063517	67·01	1·84693	29·0778	·014923	·54144	·034391
49	15·4233	·064837	65·27	1·81561	28·0027	·015322	·55078	·035711

YEARLY TABLE:—FEMALES. Interest 3 per Cent.

VALUES OF ANNUITIES. SINGLE and ANNUAL PREMIUMS, which insure £1 on the LIFE of a FEMALE.

Age	Present value of an **Annuity** of £1 (first payment at the age x).	**Annuity** (first payment at age x) which £1 will purchase.	Sum which **One Premium** of £1 will insure over **One Year.**	Sum which **One Premium** of £1 will insure over the **Whole Term of Life.**	Sum which an **Annual Premium** of £1 will insure over the **Whole Term of Life.**	**Single Premium** which will insure £1 over **One Year.**	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Annual Premium** which will insure £1 over the **Whole Term of Life.**
x	$\frac{N_x}{D_x}=A_x$	$\frac{D_x}{N_x}=a_x$	$\frac{D_x}{C_x}$	$\frac{D_x}{M_x}=\Sigma_x$	$\frac{N_x}{M_x}=s_x$	$\frac{C_x}{D_x}$	$\frac{M_x}{D_x}=\Pi_x$	$\frac{M_x}{N_x}=\pi_x$
	£	£	£	£	£	£	£	£
50	15·0942	·066251	63·53	1·78456	26·9364	·015740	·56036	·037124
51	14·7562	·067768	61·81	1·75375	25·8787	·016179	·57021	·038642
52	14·4090	·069401	60·08	1·72319	24·8295	·016644	·58032	·040275
53	14·0522	·071163	58·38	1·69287	23·7885	·017129	·59071	·042037
54	13·6852	·073072	52·35	1·66278	22·7555	·019101	·60140	·043945
55	13·3279	·075030	49·09	1·63450	21·7846	·020370	·61181	·045904
56	12·9699	·077102	46·10	1·60711	20·8441	·021692	·62223	·047975
57	12·6107	·079298	43·30	1·58054	19·9318	·023094	·63269	·050171
58	12·2505	·081630	40·65	1·55475	19·0464	·024599	·64319	·052503
59	11·8892	·084110	38·12	1·52973	18·1873	·026232	·65371	·054983
60	11·5274	·086750	35·70	1·50545	17·3539	·028011	·66425	·057624
61	11·1653	·089563	33·37	1·48193	16·5462	·029963	·67480	·060437
62	10·8037	·092561	31·15	1·45916	15·7643	·032106	·68533	·063435
63	10·4431	·095757	29·01	1·43714	15·0082	·034467	·69583	·066630
64	10·0844	·099163	26·98	1·41588	14·2784	·037063	·70627	·070036
65	9·7284	·102792	25·05	1·39539	13·5749	·039927	·71665	·073666
66	9·3758	·106658	23·22	1·37568	12·8980	·043059	·72691	·077531
67	9·0275	·110773	21·50	1·35674	12·2479	·046504	·73706	·081647
68	8·6842	·115151	19·90	1·33858	11·6246	·050263	·74706	·086024
69	8·3469	·119805	18·39	1·32121	11·0280	·054365	·75688	·090678
70	8·0162	·124747	17·00	1·30461	10·4580	·058822	·76651	·095621
71	7·6928	·129992	15·71	1·28877	9·9142	·063653	·77593	·100865
72	7·3773	·135552	14·52	1·27369	9·3963	·068879	·78512	·106425
73	7·0702	·141439	13·42	1·25934	8·9038	·074505	·79407	·112312
74	6·7721	·147665	12·41	1·24571	8·4360	·080574	·80276	·118540
75	6·4832	·154246	11·49	1·23280	7·9924	·087057	·81116	·125119
76	6·2039	·161188	10·64	1·22056	7·5723	·093983	·81929	·132060
77	5·9346	·168503	9·86	1·20897	7·1748	·101401	·82715	·139377
78	5·6753	·176202	9·15	1·19805	6·7993	·109239	·83469	·147073
79	5·4262	·184292	8·50	1·18771	6·4447	·117589	·84195	·155166
80	5·1872	·192783	7·91	1·17798	6·1104	·126405	·84891	·163655
81	4·9583	·201682	7·37	1·16882	5·7954	·135693	·85557	·172552
82	4·7395	·210992	6·87	1·16016	5·4986	·145484	·86195	·181864
83	4·5307	·220718	6·42	1·15203	5·2194	·155778	·86804	·191591
84	4·3315	·230865	6·01	1·14440	4·9570	·166522	·87382	·201734
85	4·1419	·241432	5·62	1·13720	4·7102	·177810	·87935	·212304
86	3·9617	·252419	5·28	1·13049	4·4786	·189501	·88457	·223282
87	3·7904	·263827	4·96	1·12415	4·2609	·201689	·88956	·234691
88	3·6278	·275649	4·67	1·11817	4·0565	·214358	·89432	·246518
89	3·4737	·287879	4·39	1·11254	3·8646	·227563	·89884	·258758
90	3·3277	·300512	4·15	1·10739	3·6850	·241022	·90302	·271369
91	3·1894	·313536	3·92	1·10242	3·5161	·255091	·90710	·284408
92	3·0586	·326942	3·71	1·09786	3·3580	·269561	·91086	·297799
93	2·9350	·340714	3·52	1·09372	3·2101	·284245	·91431	·311517
94	2·8181	·354844	3·34	1·08974	3·0710	·299149	·91765	·325622
95	2·7078	·369298	3·18	1·08566	2·9398	·314845	·92110	·340162
96	2·6036	·384081	3·02	1·08207	2·8173	·330994	·92415	·354949
97	2·5052	·399167	2·88	1·07899	2·7031	·346795	·92679	·369946
98	2·4123	·414540	2·74	1·07569	2·5949	·364871	·92964	·385372
99	2·3245	·430197	2·65	1·07575	2·5006	·377754	·92959	·399905
100	2·2415	·446129	2·51	1·07127	2·4013	·398030	·93347	·416448

YEARLY TABLE:—FEMALES. Interest 3 per Cent.

A Table deduced from the **English Life Table, No. 3.,** for determining the **Value of Annuities, Assurances, &c.** on the whole of a stationary Population—or on the Part of the Population of the Age x and upwards.

Age (x)	$\frac{1}{100} v^x . Q_x = Q'_x$	$\Sigma Q'_x = Z_x$	$\frac{Z_{x+1}}{Q'_x} = A'_x$	$\lambda\left(\frac{1}{100} Q_x\right) + \lambda v^x = \lambda Q'_x$	λZ_x	$\lambda Z_{x+1} - \lambda Q'_x = \lambda A'_x$	Age (x)
0	204,321	3,824,148	17·716	5·3103120	6·5825347	1·2483758	0
1	194,040	3,619,827	17·655	5·2878907	6·5586878	1·2468697	1
2	184,557	3,425,787	17·562	5·2661307	6·5347604	1·2445791	2
3	175,620	3,241,230	17·456	5·2445743	6·5107098	1·2419426	3
4	167,153	3,065,610	17·340	5·2231140	6·4865169	1·2390529	4
5	159,097	2,898,457	17·218	5·2016625	6·4621669	1·2359866	5
6	151,416	2,739,360	17·092	5·1801717	6·4376491	1·2327832	6
7	144,082	2,587,944	16·962	5·1586097	6·4129549	1·2294670	7
8	137,075	2,443,862	16·829	5·1369568	6·3880767	1·2260506	8
9	130,376	2,306,787	16·693	5·1151969	6·3630074	1·2225440	9
10	123,970	2,176,411	16·556	5·0933153	6·3377409	1·2189554	10
11	117,845	2,052,441	16·416	5·0713110	6·3122707	1·2152794	11
12	111,979	1,934,596	16·276	5·0491377	6·2865904	1·2115578	12
13	106,371	1,822,617	16·135	5·0268215	6·2606955	1·2077580	13
14	101,005	1,716,246	15·992	5·0043440	6·2345795	1·2038934	14
15	95,873	1,615,241	15·848	4·9816983	6·2082374	1·1999647	15
16	90,966	1,519,368	15·703	4·9588808	6·1816630	1·1959696	16
17	86,276	1,428,402	15·556	4·9358879	6·1548504	1·1919054	17
18	81,793	1,342,126	15·409	4·9127177	6·1277933	1·1877676	18
19	77,512	1,260,333	15·260	4·8893691	6·1004853	1·1835499	19
20	73,425	1,182,821	15·109	4·8658419	6·0729190	1·1792449	20
21	69,524	1,109,396	14·957	4·8421368	6·0450868	1·1748431	21
22	65,804	1,039,872	14·803	4·8182507	6·0169799	1·1703386	22
23	62,256	974,068	14·646	4·7941781	5·9885893	1·1657272	23
24	58,873	911,812	14·488	4·7699137	5·9599053	1·1610043	24
25	55,648	852,939	14·327	4·7454513	5·9309180	1·1561656	25
26	52,576	797,291	14·165	4·7207840	5·9016169	1·1512061	26
27	49,648	744,715	14·000	4·6959051	5·8719901	1·1461215	27
28	46,861	695,067	13·833	4·6708076	5·8420266	1·1409054	28
29	44,206	648,206	13·663	4·6454828	5·8117130	1·1355541	29
30	41,680	604,000	13·492	4·6199225	5·7810369	1·1300610	30
31	39,275	562,320	13·317	4·5941177	5·7499835	1·1244214	31
32	36,988	523,045	13·141	4·5680584	5·7185391	1·1186288	32
33	34,812	486,057	12·962	4·5417344	5·6866872	1·1126780	33
34	32,744	451,245	12·781	4·5151345	5·6544124	1·1065620	34
35	30,778	418,501	12·597	4·4882468	5·6216965	1·1002748	35
36	28,911	387,723	12·411	4·4610587	5·5885216	1·0938082	36
37	27,137	358,812	12·222	4·4335566	5·5548669	1·0871562	37
38	25,452	331,675	12·031	4·4057258	5·5207128	1·0803120	38
39	23,853	306,223	11·838	4·3775507	5·4860378	1·0732679	39
40	22,336	282,370	11·642	4·3490146	5·4508186	1·0660156	40
41	20,898	260,034	11·443	4·3200993	5·4150302	1·0585457	41
42	19,534	239,136	11·242	4·2907853	5·3786450	1·0508510	42
43	18,241	219,602	11·039	4·2610516	5·3416363	1·0429238	43
44	17,017	201,361	10·833	4·2308754	5·3039754	1·0347536	44
45	15,857	184,344	10·625	4·2002322	5·2656290	1·0263342	45
46	14,760	168,487	10·415	4·1690949	5·2265664	1·0176552	46
47	13,723	153,727	10·202	4·1374342	5·1867501	1·0087062	47
48	12,741	140,004	9·988	4·1052185	5·1461404	0·9994836	48
49	11,814	127,263	9·772	4·0724125	5·1047021	0·9899777	49
50	10,939	115,449	9·554	4·0389778	5·0623902	0·9801800	50
51	10,113	104,510	9·334	4·0048716	5·0191578	0·9700866	51
52	9,334	94,397	9·114	3·9700470	4·9749582	0·9596937	52
53	8,599	85,063	8·892	3·9344515	4·9297407	0·9490055	53
54	7,907	76,464	8·670	3·8980262	4·8834570	0·9380256	54

YEARLY TABLE:—FEMALES. Interest 3 per Cent.

A Table deduced from the **English Life Table, No. 3.**, for determining the **Value of Annuities, Assurances, &c.** on the whole of a stationary Population—or on the Part of the Population of the Age x and upwards.

Age (x)	$\frac{1}{100} . v^x . Q_x = Q'_x$	$\Sigma Q'_x = Z_x$	$\frac{Z_{x+1}}{Q'_x} = A'_x$	$\lambda \left(\frac{1}{100} Q_x\right) + \lambda v^x = \lambda Q'_x$	λZ_x	$\lambda Z_{x+1} - \lambda Q'_x = \lambda A'_x$	**Age** (x)
55	7,256	68,557	8·448	3·8607223	4·8360518	0·9267453	55
56	6,645	61,301	8·225	3·8224999	4·7874676	0·9151379	56
57	6,072	54,656	8·002	3·7833029	4·7376378	0·9031904	57
58	5,534	48,584	7·779	3·7430699	4·6864933	0·8909033	58
59	5,032	43,050	7·555	3·7017335	4·6339732	0·8782558	59
60	4,563	38,018	7·332	3·6592205	4·5799893	0·8652405	60
61	4,125	33,455	7·110	3·6154518	4·5244610	0·8518603	61
62	3,718	29,330	6·888	3·5703413	4·4673121	0·8381022	62
63	3,340	25,612	6·667	3·5237964	4·4084435	0·8239628	63
64	2,990	22,272	6·448	3·4757177	4·3477592	0·8094344	64
65	2,667	19,282	6·230	3·4259984	4·2851521	0·7945019	65
66	2,369	16,615	6·014	3·3745235	4·2205003	0·7791694	66
67	2,095	14,246	5·800	3·3211708	4·1536929	0·7634412	67
68	1,844	12,151	5·589	3·2658096	4·0846120	0·7473227	68
69	1,615	10,307	5·380	3·2083007	4·0131323	0·7308190	69
70	1,408	8,692	5·175	3·1484959	3·9391197	0·7138740	70
71	1,220	7,284	4·972	3·0862378	3·8623699	0·6965214	71
72	1,050	6,064	4·773	3·0213602	3·7827592	0·6788241	72
73	899	5,014	4·578	2·9536863	3·7001843	0·6606835	73
74	764	4,115	4·387	2·8830293	3·6143698	0·6421451	74
75	644	3,351	4·200	2·8091922	3·5251744	0·6232961	75
76	539	2,707	4·019	2·7319683	3·4324883	0·6040910	76
77	448	2,168	3·841	2·6511387	3·3360593	0·5843897	77
78	369	1,720	3·666	2·5664743	3·2355284	0·5641810	78
79	300	1,351	3·498	2·4777333	3·1306553	0·5438694	79
80	242	1,051	3·336	2·3846653	3·0216027	0·5232832	80
81	194	809	3·176	2·2870059	2·9079485	0·5018692	81
82	153	615	3·021	2·1844790	2·7888751	0·4801630	82
83	119	462	2·874	2·0767965	2·6646420	0·4584976	83
84	92	343	2·729	1·9636616	2·5352941	0·4360121	84
85	70	251	2·588	1·8447611	2·3996737	0·4129175	85
86	52	181	2·459	1·7197728	2·2576786	0·3908169	86
87	39	129	2·322	1·5883579	2·1105897	0·3658846	87
88	28	90	2·199	1·4501649	1·9542425	0·3422268	88
89	20	62	2·082	1·3048466	1·7923917	0·3184027	89
90	14	42	1·973	1·1520175	1·6232493	0·2951405	90
91	10	28	1·836	0·9912896	1·4471580	0·2639829	91
92	7	18	1·656	0·8222635	1·2552725	0·2191292	92
93	4	11	1·587	0·6445464	1·0413927	0·2005516	93
94	3	7	1·394	0·4577548	0·8450980	0·1443052	94
95	2	4	1·096	0·2613326	0·6020600	0·0396974	95
96	1	2	·881	0·0549802	0·3010300	$\bar{1}$·9450198	96
97	1	1	...	$\bar{1}$·8382918	0·0000000	...	97
98	...	...	...	$\bar{1}$·6105964	...	...	98
99	...	...	...	$\bar{1}$·3715793	...	...	99
100	...	...	...	$\bar{1}$·1211112	...	...	100

Note.—The first and second columns in this Table correspond in the nature of their construction and relations with the columns D and N in the previous Tables for calculating Life Annuities. The numbers in the first column are obtained by multiplying the numbers in the column Q of the Life Table by the successive powers of $v = \frac{1}{1 \cdot 03}$ (when the interest of money is 3 per cent.), and dividing by 100. The division by 100 is equivalent to cutting off 2 figures, which is done merely for the sake of convenience, as the Table in its present form is sufficiently extensive for all the purposes to which it can be applied. The v varies with the interest of money.

YEARLY TABLE:—FEMALES. Interest $3\frac{1}{4}$ per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	488,255	9,236,760	6·9655196	55	36,435	475,021	5·6767128
1	409,182	8,748,505	6·9419339	56	34,547	438,586	5·6420547
2	371,764	8,339,323	6·9211308	57	32,712	404,039	5·6064233
3	347,323	7,967,559	6·9013253	58	30,929	371,327	5·5697565
4	328,257	7,620,236	6·8819684	59	29,196	340,398	5·5319870
5	312,303	7,291,979	6·8628454	60	27,513	311,202	5·4930424
6	298,457	6,979,676	6·8438353	61	25,879	283,689	5·4528425
7	286,012	6,681,219	6·8248558	62	24,290	257,810	5·4112998
8	274,494	6,395,207	6·8058546	63	22,748	233,520	5·3683241
9	263,811	6,120,713	6·7868020	64	21,250	210,772	5·3238129
10	253,816	5,856,902	6·7676680	65	19,795	189,522	5·2776596
11	244,388	5,603,086	6·7484273	66	18,384	169,727	5·2297509
12	235,428	5,358,698	6·7290593	67	17,015	151,343	5·1799623
13	226,853	5,123,270	6·7095473	68	15,690	134,328	5·1281665
14	218,597	4,896,417	6·6898784	69	14,410	118,638	5·0742239
15	210,609	4,677,820	6·6700435	70	13,175	104,228	5·0179845
16	202,848	4,467,211	6·6500365	71	11,987	91,053	4·9592943
17	195,284	4,264,363	6·6298542	72	10,848	79,066	4·8979898
18	187,898	4,069,079	6·6094962	73	9,761·5	68,218·4	4·8339015
19	180,676	3,881,181	6·5889639	74	8,728·7	58,456·9	4·7668358
20	173,613	3,700,505	6·5682610	75	7,752·4	49,728·2	4·6966027
21	166,708	3,526,892	6·5473922	76	6,835·1	41,975·8	4·6229990
22	160,042	3,360,184	6·5263630	77	5,979·1	35,140·7	4·5458104
23	153,609	3,200,142	6·5051692	78	5,186·1	29,161·6	4·4648113
24	147,404	3,046,533	6·4838059	79	4,457·7	23,975·5	4·3797677
25	141,420	2,899,129	6·4622676	80	3,794·5	19,517·8	4·2904309
26	135,652	2,757,709	6·4405484	81	3,196·6	15,723·3	4·1965437
27	130,094	2,622,057	6·4186422	82	2,663·2	12,526·7	4·0978367
28	124,739	2,491,963	6·3965415	83	2,192·9	9,863·5	3·9940310
29	119,582	2,367,224	6·3742394	84	1,783·1	7,670·6	3·8848293
30	114,616	2,247,642	6·3517271	85	1,430·7	5,887·5	3·7699309
31	109,835	2,133,026	6·3289962	86	1,132·0	4,456·8	3·6490231
32	105,232	2,023,191	6·3060369	87	882·33	3,324·75	3·5217590
33	100,803	1,917,959	6·2828393	88	677·01	2,442·42	3·3878204
34	96,540	1,817,156	6·2593922	89	510·91	1,765·41	3·2468456
35	92,439	1,720,616	6·2356839	90	378·88	1,254·50	3·0984707
36	88,492	1,628,177	6·2117017	91	275·84	875·62	2·9423157
37	84,696	1,539,685	6·1874319	92	196·97	599·78	2·7779920
38	81,043	1,454,989	6·1628597	93	137·82	402·81	2·6051002
39	77,530	1,373,946	6·1379696	94	94·403	264·988	2·4232262
40	74,150	1,296,416	6·1127444	95	63·235	170·585	2·2319409
41	70,899	1,222,266	6·0871657	96	41·378	107·350	2·0308020
42	67,772	1,151,367	6·0612137	97	26·422	65·972	1·8193597
43	64,765	1,083,595	6·0348670	98	16·447	39·550	1·5971465
44	61,872	1,018,830	6·0081017	99	9·9684	23·1031	1·3636703
45	59,089	956,958	5·9808929	100	5·8762	13·1347	1·1184202
46	56,413	897,869	5·9532130	101	3·3650	7·2585	0·8608469
47	53,838	841,456	5·9250314	102	1·8697	3·8935	0·5903402
48	51,362	787,618	5·8963156	103	1·0068	2·0238	0·3061676
49	48,981	736,256	5·8670288	104	·5247	1·0170	0·0073210
50	46,691	687,275	5·8371306	105	·2644	·4923	$\bar{1}$·6922298
51	44,488	640,584	5·8065761	106	·1286	·2279	$\bar{1}$·3577443
52	42,369	596,096	5·7753162	107	·0603	·0993	$\bar{2}$·9969492
53	40,332	553,727	5·7432957	108	·0272	·0390	$\bar{2}$·5910646
54	38,374	513,395	5·7104517	109	·0118	·0118	$\bar{2}$·0718820

YEARLY TABLE:—FEMALES. Interest $3\frac{1}{2}$ per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	488,255	9,093,617	6·9587366	55	34,853	451,118	5·6542902
1	408,852	8,605,362	6·9347692	56	33,021	416,265	5·6193699
2	371,165	8,196,510	6·9136289	57	31,242	383,244	5·5834754
3	346,483	7,825,345	6·8935035	58	29,515	352,002	5·5465452
4	327,199	7,478,862	6·8738355	59	27,839	322,487	5·5085123
5	311,046	7,151,663	6·8544071	60	26,213	294,648	5·4693035
6	297,015	6,840,617	6·8350952	61	24,636	268,435	5·4288392
7	284,401	6,543,602	6·8158168	62	23,105	243,799	5·3870319
8	272,728	6,259,201	6·7965189	63	21,621	220,694	5·3437905
9	261,902	5,986,473	6·7771710	64	20,180	199,073	5·2990123
10	251,776	5,724,571	6·7577430	65	18,784	178,893	5·2525934
11	242,229	5,472,795	6·7382092	66	17,430	160,109	5·2044158
12	233,159	5,230,566	6·7185487	67	16,120	142,679	5·1543601
13	224,486	4,997,407	6·6987447	68	14,853	126,559	5·1022931
14	216,142	4,772,921	6·6787842	69	13,629	111,706	5·0480765
15	208,076	4,556,779	6·6586580	70	12,451	98,077	4·9915672
16	200,246	4,348,703	6·6383597	71	11,320	85,626	4·9326057
17	192,624	4,148,457	6·6178866	72	10,236	74,306	4·8710239
18	185,189	3,955,833	6·5972379	73	9,203·2	64,069·7	4·8066527
19	177,928	3,770,644	6·5764156	74	8,222·8	54,866·5	4·7393073
20	170,834	3,592,716	6·5554229	75	7,297·2	46,643·7	4·6687930
21	163,907	3,421,882	6·5342651	76	6,428·6	39,346·5	4·5949061
22	157,226	3,257,975	6·5129478	77	5,618·9	32,917·9	4·5174321
23	150,785	3,100,749	6·4914666	78	4,869·8	27,299·0	4·4361467
24	144,577	2,949,964	6·4698167	79	4,182·4	22,429·2	4·3508138
25	138,596	2,805,387	6·4479928	80	3,557·3	18,246·8	4·2611867
26	132,836	2,666,791	6·4259890	81	2,994·4	14,689·5	4·1670070
27	127,291	2,533,955	6·4037990	82	2,492·7	11,695·1	4·0680039
28	121,953	2,406,664	6·3814155	83	2,050·8	9,202·4	3·9639011
29	116,817	2,284,711	6·3588313	84	1,666·3	7,151·6	3·8544032
30	111,875	2,167,894	6·3360380	85	1,335·9	5,485·3	3·7392004
31	107,122	2,056,019	6·3130271	86	1,056·1	4,149·4	3·6179853
32	102,550	1,948,897	6·2897890	87	822·52	3,093·34	3·4904276
33	98,154	1,846,347	6·2663134	88	630·61	2,270·82	3·3561827
34	93,928	1,748,193	6·2425893	89	475·51	1,640·21	3·2148995
35	89,865	1,654,265	6·2186051	90	352·34	1,164·70	3·0662141
36	85,959	1,564,400	6·1943478	91	256·31	812·36	2·9097485
37	82,205	1,478,441	6·1698040	92	182·88	556·05	2·7451138
38	78,596	1,396,236	6·1449588	93	127·86	373·17	2·5719067
39	75,128	1,317,640	6·1197968	94	87·509	245·312	2·3897188
40	71,796	1,242,512	6·0943006	95	58·569	157·803	2·1981153
41	68,593	1,170,716	6·0684515	96	38·294	99·234	1·9966605
42	65,515	1,102,123	6·0422301	97	24·434	60·940	1·7849024
43	62,557	1,036,608	6·0156146	98	15·197	36·506	1·5623642
44	59,714	974,051	5·9885817	99	9·2032	21·3087	1·3285570
45	56,982	914,337	5·9611063	100	5·4207	12·1055	1·0829828
46	54,358	857,355	5·9331607	101	3·1017	6·6848	0·8250884
47	51,835	802,997	5·9047139	102	1·7220	3·5831	0·5542589
48	49,411	751,162	5·8757336	103	·9265	1·8611	0·2697697
49	47,082	701,751	5·8461830	104	·4825	·9346	$\bar{1}$·9706258
50	44,845	654,669	5·8160217	105	·2429	·4521	$\bar{1}$·6552345
51	42,695	609,824	5·7852045	106	·1181	·2092	$\bar{1}$·3205617
52	40,629	567,129	5·7536818	107	·0553	·0911	$\bar{2}$·9595184
53	38,644	526,500	5·7213984	108	·0250	·0358	$\bar{2}$·5538830
54	36,738	487,856	5·6882916	109	·0108	·0108	$\bar{2}$·0334238

YEARLY TABLE:—FEMALES. Interest 3½ per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	488,255	8,819,292	6·9454337	55	31,897	406,957	5·6095485
1	408,194	8,331,037	6·9206991	56	30,172	375,060	5·5741007
2	369,971	7,922,843	6·8988811	57	28,500	344,888	5·5376781
3	344,812	7,552,872	6·8781121	58	26,881	316,388	5·5002200
4	325,097	7,208,060	6·8578184	59	25,314	289,507	5·4616591
5	308,549	6,882,963	6·8377755	60	23,797	264,193	5·4219213
6	294,157	6,574,414	6·8178571	61	22,329	240,396	5·3809273
7	281,211	6,280,257	6·7979775	62	20,908	218,067	5·3385899
8	269,235	5,999,046	6·7780822	63	19,533	197,159	5·2948166
9	258,131	5,729,811	6·7581404	64	18,203	177,626	5·2495065
10	247,751	5,471,680	6·7381207	65	16,916	159,423	5·2025510
11	237,972	5,223,929	6·7179974	66	15,672	142,507	5·1538362
12	228,694	4,985,957	6·6977486	67	14,470	126,835	5·1032391
13	219,831	4,757,263	6·6773572	68	13,311	112,365	5·0506311
14	211,320	4,537,432	6·6568102	69	12,195	99,054	4·9958720
15	203,106	4,326,112	6·6360978	70	11,123	86,859	4·9388148
16	195,149	4,123,006	6·6152139	71	10,096	75,736	4·8793024
17	187,419	3,927,857	6·5941557	72	9,114·8	65,640·2	4·8171699
18	179,894	3,740,438	6·5729224	73	8,181·8	56,525·4	4·7522437
19	172,562	3,560,544	6·5515164	74	7,298·4	48,343·6	4·6843390
20	165,416	3,387,982	6·5299411	75	6,466·4	41,045·2	4·6132624
21	158,453	3,222,566	6·5082018	76	5,687·5	34,578·8	4·5388099
22	151,750	3,064,113	6·4863047	77	4,963·2	28,891·3	4·4607671
23	145,298	2,912,363	6·4642455	78	4,294·6	23,928·1	4·3789082
24	139,092	2,767,065	6·4420194	79	3,682·4	19,633·5	4·2929978
25	133,123	2,627,973	6·4196209	80	3,127·0	15,951·1	4·2027906
26	127,385	2,494,850	6·3970444	81	2,627·9	12,824·1	4·1080269
27	121,871	2,367,465	6·3742835	82	2,184·2	10,196·2	4·0084383
28	116,572	2,245,594	6·3513313	83	1,794·1	8,012·0	3·9037409
29	111,483	2,129,022	6·3281802	84	1,455·3	6,217·9	3·7936437
30	106,595	2,017,539	6·3048219	85	1,164·9	4,762·6	3·6778441
31	101,901	1,910,944	6·2812480	86	919·41	3,597·66	3·5560201
32	97,396	1,809,043	6·2574489	87	714·92	2,678·25	3·4278511
33	93,071	1,711,647	6·2334143	88	547·23	1,963·33	3·2929933
34	88,920	1,618,576	6·2091331	89	411·97	1,416·10	3·1510939
35	84,936	1,529,656	6·1845938	90	304·77	1,004·13	3·0017900
36	81,114	1,444,720	6·1597837	91	221·35	699·36	2·8447008
37	77,446	1,363,606	6·1346889	92	157·68	478·01	2·6794370
38	73,928	1,286,160	6·1092950	93	110·06	320·33	2·5055976
39	70,552	1,212,232	6·0835858	94	75·207	210·273	2·3227835
40	67,313	1,141,680	6·0575445	95	50·255	135·066	2·1305460
41	64,207	1,074,367	6·0311527	96	32·805	84·811	1·9284522
42	61,227	1,010,160	6·0043903	97	20·898	52·006	1·7160535
43	58,368	948,933	5·9772356	98	12·977	31·108	1·4928721
44	55,626	890,565	5·9496657	99	7·8460	18·1308	1·2584170
45	52,996	834,939	5·9216548	100	4·6139	10·2848	1·0121959
46	50,474	781,943	5·8931751	101	2·6357	5·6709	0·7536520
47	48,054	731,469	5·8641959	102	1·4510	3·0352	0·4821873
48	45,733	683,415	5·8346845	103	·7848	1·5742	0·1970599
49	43,507	637,682	5·8046042	104	·4081	·7894	$\bar{1}$·8972971
50	41,373	594,175	5·7739144	105	·2051	·3813	$\bar{1}$·5812668
51	39,326	552,802	5·7425696	106	·0995	·1762	$\bar{1}$·2460059
52	37,363	513,476	5·7105201	107	·0466	·0767	$\bar{2}$·8847954
53	35,480	476,113	5·6777100	108	·0210	·0301	$\bar{2}$·4785665
54	33,676	440,633	5·6440770	109	·0091	·0091	$\bar{3}$·9590414

YEARLY TABLE:—FEMALES. Interest $3\frac{3}{4}$ per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	488,255	8,435,552	6·9261135	55	27,933	348,883	5·5426798
1	407,210	7,947,297	6·9002195	56	26,359	320,950	5·5064374
2	368,190	7,540,087	6·8773763	57	24,838	294,591	5·4692195
3	342,325	7,171,897	6·8556340	58	23,371	269,753	5·4309663
4	321,975	6,829,572	6·8343935	59	21,956	246,382	5·3916090
5	304,850	6,507,597	6·8134207	60	20,590	224,426	5·3510732
6	289,930	6,202,747	6·7925841	61	19,273	203,836	5·3092809
7	276,502	5,912,817	6·7717944	62	18,003	184,563	5·2661447
8	264,088	5,636,315	6·7509953	63	16,779	166,560	5·2215707
9	252,587	5,372,227	6·7301544	64	15,598	149,781	5·1754567
10	241,846	5,119,640	6·7092394	65	14,461	134,183	5·1276975
11	231,740	4,877,794	6·6882235	66	13,365	119,722	5·0781740
12	222,168	4,646,054	6·6670843	67	12,310	106,357	5·0267661
13	213,044	4,423,886	6·6458039	68	11,297	94,047	4·9733449
14	204,302	4,210,842	6·6243689	69	10,325	82,750	4·9177680
15	195,887	4,006,540	6·6027695	70	9,394·6	72,425·1	4 8598891
16	187,759	3,810,653	6·5809994	71	8,506·4	63,030·5	4·7995508
17	179,887	3,622,894	6·5590556	72	7,661·4	54,524·1	4·7365885
18	172,249	3,443,007	6·5369379	73	6,860·6	46,862·7	4·6708273
19	164,831	3,270,758	6·5146485	74	6,105·1	40,002·1	4·6020828
20	157,624	3,105,927	6·4921913	75	5,396·1	33,897·0	4·5301613
21	150,625	2,948,303	6·4695721	76	4,734·7	28,500·9	4·4548586
22	143,905	2,797,678	6·4467977	77	4,121·8	23,766·2	4·3759598
23	137,455	2,653,773	6·4238638	78	3,557·9	19,644·4	4·2932387
24	131,267	2,516,318	6·4007655	79	3,043·4	16,086·5	4·2064616
25	125,331	2,385,051	6·3774977	80	2,578·1	13,043·1	4·1153808
26	119,640	2,259,720	6·3540546	81	2,161·4	10,465·0	4·0197392
27	114,185	2,140,080	6·3304300	82	1,792·1	8,303·6	3·9192664
28	108,958	2,025,895	6·3066170	83	1,468·5	6,511·5	3·8136810
29	103,950	1,916,937	6·2826079	84	1,188·3	5,043·0	3·7026890
30	99,152	1,812,987	6·2583947	85	948·91	3,854·72	3·5859929
31	94,558	1,713,835	6·2339690	86	747·14	2,905·81	3·4632672
32	90,160	1,619,277	6·2093212	87	579·56	2,158·67	3·3341863
33	85,948	1,529,117	6·1844407	88	442·55	1,579·11	3·1984124
34	81,917	1,443,169	6·1593172	89	332·37	1,136·56	3·0555924
35	78,059	1,361,252	6·1339385	90	245·29	804·19	2·9053587
36	74,366	1,283,193	6·1082920	91	177·72	558·90	2·7473341
37	70,833	1,208,827	6·0823642	92	126·29	381·18	2·5811301
38	67,452	1,137,994	6·0561401	93	87·943	254·892	2·4063562
39	64,216	1,070,542	6·0296037	94	59·947	166·949	2·2225838
40	61,121	1,006,326	6·0027387	95	39·961	107·002	2·0293919
41	58,160	945,205	5·9755260	96	26·023	67·041	1·8263405
42	55,327	887,045	5·9479457	97	16·537	41·018	1·6129745
43	52,617	831,718	5·9199761	98	10·244	24·481	1·3888292
44	50,024	779,101	5·8915938	99	6·1790	14·2370	1·1534185
45	47,544	729,077	5·8627734	100	3·6248	8·0580	0·9062273
46	45,172	681,533	5·8334869	101	2·0658	4·4332	0·6467173
47	42,903	636,361	5·8037036	102	1·1423	2·3674	0·3742716
48	40,732	593,458	5·7733900	103	·6121	1·2251	0·0881715
49	38,657	552,726	5·7425099	104	·3175	·6130	$\bar{1}$·7874605
50	36,671	514,069	5·7110215	105	·1592	·2955	$\bar{1}$·4705575
51	34,773	477,398	5·6788806	106	·0771	·1363	$\bar{1}$·1344959
52	32,958	442,625	5·6460359	107	·0360	·0592	$\bar{2}$·7723217
53	31,222	409,667	5·6124310	108	·0162	·0232	$\bar{2}$·3654880
54	29,562	378,445	5·5780028	109	·0070	·0070	$\bar{3}$·8450980

YEARLY TABLE:—FEMALES. Interest 4 per Cent.

Age (x)	D_x	N_x	S_x	C_x	M_x	R_x	Age (x)
0	488,255	8,082,050	149,289,213	63,244·24	177,406·81	2,340,157·77	0
1	406,231	7,593,795	141,207,163	24,185·46	114,162·57	2,162,750·96	1
2	366,422	7,187,564	133,613,368	12,466·39	89,977·11	2,048,588·39	2
3	339,862	6,821,142	126,425,804	7,900·95	77,510·72	1,958,611·28	3
4	318,890	6,481,280	119,604,662	5,421·43	69,609·77	1,881,100·56	4
5	301,203	6,162,390	113,123,382	3,845·67	64,188·34	1,811,490·79	5
6	285,773	5,861,187	106,960,992	2,899·09	60,342·67	1,747,302·45	6
7	271,882	5,575,414	101,099,805	2,374·01	57,443·58	1,686,959·78	7
8	259,052	5,303,532	95,524,391	1,913·85	55,069·57	1,629,516·20	8
9	247,174	5,044,480	90,220,859	1,572·71	53,155·72	1,574,446·63	9
10	236,094	4,797,306	85,176,379	1,328·39	51,583·01	1,521,290·91	10
11	225,686	4,561,212	80,379,073	1,162·37	50,254·62	1,469,707·90	11
12	215,843	4,335,526	75,817,861	1,060·01	49,092·25	1,419,453·28	12
13	206,481	4,119,683	71,482,335	1,007·69	48,032·24	1,370,361·03	13
14	197,532	3,913,202	67,362,652	993·37	47,024·55	1,322,328·79	14
15	188,942	3,715,670	63,449,450	1,008·02	46,031·18	1,275,304·24	15
16	180,667	3,526,728	59,733,780	1,041·63	45,023·16	1,229,273·06	16
17	172,676	3,346,061	56,207,052	1,088·45	43,981·53	1,184,249·90	17
18	164,947	3,173,385	52,860,991	1,139·14	42,893·08	1,140,268·37	18
19	157,463	3,008,438	49,687,606	1,190·71	41,753·94	1,097,375·29	19
20	150,216	2,850,975	46,679,168	1,237·07	40,563·23	1,055,621·35	20
21	143,202	2,700,759	43,828,193	1,209·75	39,326·16	1,015,058·12	21
22	136,484	2,557,557	41,127,434	1,181·48	38,116·41	975,731·96	22
23	130,053	2,421,073	38,569,877	1,151·64	36,934·93	937,615·55	23
24	123,899	2,291,020	36,148,804	1,121·22	35,783·29	900,680·62	24
25	118,013	2,167,121	33,857,784	1,090·72	34,662·07	864,897·33	25
26	112,383	2,049,108	31,690,663	1,059·52	33,571·35	830,235·26	26
27	107,001	1,936,725	29,641,555	1,028·44	32,511·83	796,663·91	27
28	101,857	1,829,724	27,704,830	997·87	31,483·39	764,152·08	28
29	96,942	1,727,867	25,875,106	967·50	30,485·52	732,668·69	29
30	92,246	1,630,925	24,147,239	937·70	29,518·02	702,183·17	30
31	87,760	1,538,679	22,516,314	908·48	28,580·32	672,665·15	31
32	83,477	1,450,919	20,977,635	879·57	27,671·84	644,084·83	32
33	79,386	1,367,442	19,526,716	852·06	26,792·27	616,412·99	33
34	75,481	1,288,056	18,159,274	824·87	25,940·21	589,620·72	34
35	71,753	1,212,575	16,871,218	798·99	25,115·34	563,680·51	35
36	68,194	1,140,822	15,658,643	773·41	24,316·35	538,565·17	36
37	64,798	1,072,628	14,517,821	749·30	23,542·94	514,248·82	37
38	61,556	1,007,830	13,445,193	725·68	22,793·64	490,705·88	38
39	58,463	946,274	12,437,363	703·18	22,067·96	467,912·24	39
40	55,511	887,811	11,491,089	681·35	21,364·78	445,844·28	40
41	52,695	832,300	10,603,278	660·72	20,683·43	424,479·50	41
42	50,008	779,605	9,770,978	640·50	20,022·71	403,796·07	42
43	47,444	729,597	8,991,373	621·38	19,382·21	383,773·36	43
44	44,998	682,153	8,261,776	602·96	18,760·83	364,391·15	44
45	42,664	637,155	7,579,623	585·20	18,157·87	345,630·32	45
46	40,438	594,491	6,942,468	568·39	17,572·67	327,472·45	46
47	38,314	554,053	6,347,977	552·01	17,004·28	309,899·78	47
48	36,288	515,739	5,793,924	536·34	16,452·27	292,895·50	48
49	34,356	479,451	5,278,185	521·34	15,915·93	276,443·23	49
50	32,514	445,095	4,798,734	506·84	15,394·59	260,527·30	50
51	30,756	412,581	4,353,639	492·81	14,887·75	245,132·71	51
52	29,081	381,825	3,941,058	479·36	14,394·94	230,244·96	52
53	27,483	352,744	3,559,233	466·21	13,915·58	215,850·02	53
54	25,959	325,261	3,206,489	491·07	13,449·37	201,934·44	54

YEARLY TABLE:—FEMALES. Interest 4 per Cent.

Age (x)	D_x	N^x	S_x	C_x	M_x	R_x	Age (x)
55	24,470	299,302	2,881,228	493·65	12,958·30	188,485·07	55
56	23,035	274,832	2,581,926	494·87	12,464·65	175,526·77	56
57	21,654	251,797	2,307,094	495·27	11,969·78	163,062·12	57
58	20,326	230,143	2,055,297	495·20	11,474·51	151,092·34	58
59	19,049	209,817	1,825,154	494·88	10,979·31	139,617·83	59
60	17,822	190,768	1,615,337	494·41	10,484·43	128,638·52	60
61	16,642	172,946	1,424,569	493·85	9,990·02	118,154·09	61
62	15,508	156,304	1,251,623	493·11	9,496·17	108,164·07	62
63	14,418	140,796	1,095,319	492·18	9,003·05	98,667·90	63
64	13,372	126,378	954,523	490·83	8,510·88	89,664·84	64
65	12,366	113,006	828,145	489·01	8,020·05	81,153·96	65
66	11,402	100,640	715,139	486·23	7,531·04	73,133·91	66
67	10,477	89,238	614,499	482 54	7,044·81	65,602·87	67
68	9,591·5	78,761·2	525,261·2	477·47	6,562·27	58,558·06	68
69	8,745·2	69,169·7	446,500·0	470·86	6,084·80	51,995·79	69
70	7,938·0	60,424·5	377,330·3	462·44	5,613·94	45,910·99	70
71	7,170·2	52,486·5	316,905·8	452·02	5,151·50	40,297·05	71
72	6,442·4	45,316·3	264,419·3	439·49	4,699·48	35,145·55	72
73	5,755·2	38,873·9	219,103·0	424·67	4,259·99	30,446·07	73
74	5,109·1	33,118·7	180,229·1	407·70	3,835·32	26,186·08	74
75	4,504·9	28,009·6	147,110·4	388·42	3,427·62	22,350·76	75
76	3,943·3	23,504·7	119,100·8	367·04	3,039·20	18,923·14	76
77	3,424·5	19,561·4	95,596·1	343·91	2,672·16	15,883·94	77
78	2,948·9	16,136·9	76,034·7	319·04	2,328·25	13,211·78	78
79	2,516·5	13,188·0	59,897·8	293·06	2,009·21	10,883·53	79
80	2.126·6	10,671·5	46,709·8	266·23	1,716·15	8,874·32	80
81	1,778·6	8,544·9	36,038·3	239·02	1,449·92	7,158·17	81
82	1,471·2	6,766·3	27,493·4	211·97	1,210·90	5,708·25	82
83	1,202·6	5,295·1	20,727·1	185·54	998·93	4,497·35	83
84	970·82	4,092·49	15,432·04	160·11	813·39	3,498·42	84
85	773·36	3,121·67	11,339·55	136·19	653·28	2,685·03	85
86	607·45	2,348·31	8,217·88	114·01	517·09	2,031·75	86
87	470·07	1,740·86	5,869·57	93·90	403·08	1,514·66	87
88	358·08	1,270·79	4,128·71	76·02	309·18	1,111·58	88
89	268·28	912·71	2,857·92	60·46	233·16	802·40	89
90	197·52	644·43	1,945·21	47·15	172·70	569·24	90
91	142·76	446·91	1,300·78	36·07	125·55	396·54	91
92	101·21	304·15	853·87	27·02	89·48	270·99	92
93	70·307	202·938	549·718	19·79	62·46	181·51	93
94	47·810	132·631	346·780	14·16	42·67	119·05	94
95	31·794	84·821	214·149	9·91	28·51	76·38	95
96	20·655	53·027	129·328	6·77	18·60	47·87	96
97	13·094	32·372	76·301	4·50	11·83	29·27	97
98	8·0918	19·2778	43·9293	2·92	7·33	17·44	98
99	4·8690	11·1860	24·6515	1·82	4·41	10·11	99
100	2·8495	6·3170	13·4655	1·12	2·59	5·70	100
101	1·6200	3·4675	7·1485	·66	1·47	3·11	101
102	·8936	1·8475	3·6810	·39	·81	1·64	102
103	·4777	·9539	1·8335	·20	·42	·83	103
104	·2472	·4762	·8796	·11	·22	·41	104
105	·1236	·2290	·4034	·06	·11	·19	105
106	·0597	·1054	·1744	·03	·05	·08	106
107	·0278	·0457	·0690	·01	·02	·03	107
108	·0125	·0179	·0233	·01	·01	·01	108
109	·0054	·0054	·0054	...	...	...	109

YEARLY TABLE:—FEMALES. Interest 4 per Cent.

Age (x)	$\lambda\, D_x$	$\lambda\, N_x$	$\lambda\, M_x$	$\lambda\left(\frac{N_x}{D_x}\right)=\lambda\, A_x$	$\frac{N_x}{D_x}=A_x$	$\frac{D_x}{N_x}=a_x$	Age (x)
0	5·6886465	6·9075215	5·2489703	1·2188750	16·5529	·060412	0
1	5·6087736	6·8804589	5·0575238	1·2716853	18·6933	·053495	1
2	5·5639812	6·8565817	4·9541321	1·2926005	19·6155	·050980	2
3	5·5313033	6·8338571	4·8893617	1·3025538	20·0703	·049825	3
4	5·5036409	6·8116608	4·8426701	1·3080199	20·3245	·049202	4
5	5·4788599	6·7897492	4·8074561	1·3108893	20·4592	·048878	5
6	5·4560216	6·7679855	4·7806245	1·3119639	20·5099	·048757	6
7	5·4343811	6·7462771	4·7592415	1·3118960	20·5067	·048765	7
8	5·4133869	6·7245653	4·7409118	1·3111784	20·4729	·048845	8
9	5·3930031	6·7028164	4·7255500	1·3098133	20·4086	·048999	9
10	5·3730859	6·6809974	4·7125067	1·3079115	20·3194	·049214	10
11	5·3535040	6·6590803	4·7011760	1·3055763	20·2105	·049479	11
12	5·3341380	6·6370418	4·6910130	1·3029038	20·0865	·049785	12
13	5·3148811	6·6148638	4·6815329	1·2999827	19·9518	·050121	13
14	5·2956384	6·5925322	4·6723247	1·2968938	19·8104	·050478	14
15	5·2763275	6·5700371	4·6630521	1·2937096	19·6657	·050850	15
16	5·2568780	6·5473720	4·6534360	1·2904940	19·5206	·051228	16
17	5·2372319	6·5245338	4·6432704	1·2873019	19·3777	·051606	17
18	5·2173433	6·5015228	4·6323872	1·2841795	19·2389	·051978	18
19	5·1971787	6·4783411	4·6206975	1·2811624	19·1057	·052340	19
20	5·1767166	6·4549934	4·6081325	1·2782768	18·9792	·052689	20
21	5·1559478	6·4314859	4·5946816	1·2755381	18·8598	·053023	21
22	5·1350816	6·4078253	4·5811120	1·2727437	18·7389	·053365	22
23	5·1141211	6·3840078	4·5674373	1·2698867	18·6160	·053717	23
24	5·0930695	6·3600289	4·5536802	1·2669594	18·4910	·054080	24
25	5·0719290	6·3358832	4·5398545	1·2639542	18·3634	·054456	25
26	5·0507016	6·3115649	4·5259689	1·2608633	18·2332	·054845	26
27	5·0293889	6·2870680	4·5120414	1·2576791	18·1000	·055249	27
28	5·0079918	6·2623856	4·4980814	1·2543938	17·9636	·055668	28
29	4·9865110	6·2375104	4·4840936	1·2509994	17·8238	·056105	29
30	4·9649464	6·2124339	4·4700872	1·2474875	17·6802	·056560	30
31	4·9432978	6·1871481	4·4560671	1·2438503	17·5328	·057036	31
32	4·9215642	6·1616432	4·4420380	1·2400790	17·3812	·057534	32
33	4·8997444	6·1359089	4·4280094	1·2361645	17·2252	·058054	33
34	4·8778366	6·1099348	4·4139735	1·2320982	17·0647	·058601	34
35	4·8558384	6·0837086	4·3999391	1·2278702	16·8994	·059174	35
36	4·8337473	6·0572179	4·3858984	1·2234706	16·7290	·059776	36
37	4·8115599	6·0304491	4·3718607	1·2188892	16·5535	·060410	37
38	4·7892727	6·0033873	4·3578137	1·2141146	16·3725	·061078	38
39	4·7668815	5·9760169	4·3437622	1·2091354	16·1858	·061782	39
40	4·7443817	5·9483205	4·3296984	1·2039388	15·9933	·062526	40
41	4·7217683	5·9202799	4·3156225	1·1985116	15·7947	·063312	41
42	4·6990356	5·8918746	4·3015228	1·1928390	15·5897	·064145	42
43	4·6761778	5·8630830	4·2874033	1·1869052	15·3782	·065027	43
44	4·6531884	5·8338818	4·2732521	1·1806934	15·1598	·065964	44
45	4·6300603	5·8042451	4·2590649	1·1741848	14·9343	·066960	45
46	4·6067863	5·7741453	4·2448377	1·1673590	14·7014	·068021	46
47	4·5833583	5·7435513	4·2305582	1·1601930	14·4608	·069152	47
48	4·5597682	5·7124300	4·2162259	1·1526618	14·2122	·070362	48
49	4·5360070	5·6807442	4·2018320	1·1447372	13·9552	·071658	49
50	4·5120655	5·6484527	4·1873681	1·1363872	13·6895	·073049	50
51	4·4879340	5·6155093	4·1728291	1·1275753	13·4145	·074546	51
52	4·4636022	5·5818644	4·1582099	1·1182622	13·1299	·076162	52
53	4·4390594	5·5474596	4·1435013	1·1084002	12·8351	·077911	53
54	4·4142945	5·5122320	4·1287020	1·0979375	12·5296	·079811	54

YEARLY TABLE:—FEMALES. Interest 4 per Cent.

Age (x)	λD_x	λN_x	λM_x	$\lambda\left(\frac{N_x}{D_x}\right)=\lambda A_x$	$\frac{N_x}{D_x}=A_x$	$\frac{D_x}{N_x}=a_x$	**Age** (x)
55	4·3886327	5·4761096	4·1125481	1·0874769	12·2314	·081757	55
56	4·3623913	5·4390673	4·0956801	1·0766760	11·9310	·083815	56
57	4·3355443	5·4010505	4·0780862	1·0655062	11·6280	·085999	57
58	4·3080550	5·3619978	4·0597342	1·0539428	11·3225	·088320	58
59	4·2798753	5·3218407	4·0405751	1·0419654	11·0145	·090789	59
60	4·2509466	5·2805055	4·0205449	1·0295589	10·7043	·093420	60
61	4·2211992	5·2379106	3·9995664	1·0167114	10·3923	·096225	61
62	4·1905524	5·1939701	3·9775485	1·0034177	10·0790	·099216	62
63	4·1589145	5·1485903	3·9543902	0·9896758	9·7651	·102406	63
64	4·1261831	5·1016715	3·9299745	0·9754884	9·4512	·105806	64
65	4·0922447	5·0531015	3·9041771	0·9608568	9·1381	·109432	65
66	4·0569749	5·0027706	3·8768549	0·9457957	8·8266	·113293	66
67	4·0202383	4·9505498	3·8478693	0·9303115	8·5175	·117405	67
68	3·9818886	4·8963123	3·8170541	0·9144237	8·2115	·121780	68
69	3·9417687	4·8399159	3·7842463	0·8981472	7·9095	·126431	69
70	3·8997102	4·7812131	3·7492678	0·8815029	7·6121	·131370	70
71	3·8555342	4·7200477	3·7119337	0·8645135	7·3200	·136611	71
72	3·8090505	4·6562545	3·6720498	0·8472040	7·0340	·142166	72
73	3·7600582	4·5896581	3·6294086	0·8295999	6·7546	·148047	73
74	3·7083453	4·5200733	3·5838016	0·8117280	6·4823	·154267	74
75	3·6536890	4·4473069	3·5349926	0·7936179	6·2175	·160836	75
76	3·5958554	4·3711548	3·4827593	0·7752994	5·9607	·167765	76
77	3·5345998	4·2914000	3·4268625	0·7568002	5·7122	·175065	77
78	3·4696665	4·2078201	3·3670296	0·7381536	5·4721	·182745	78
79	3·4007889	4·1201789	3·3030254	0·7193900	5·2407	·190814	79
80	3·3276894	4·0282255	3·2345553	0·7005361	5·0181	·199280	80
81	3·2500794	3·9317070	3·1613440	0·6816276	4·8043	·208148	81
82	3·1676596	3·8303512	3·0831083	0·6626916	4·5993	·217424	82
83	3·0801195	3·7238742	2·9995351	0·6437547	4·4031	·227115	83
84	2·9871379	3·6119876	2·9102988	0·6248497	4·2155	·237219	84
85	2·8883824	3·4943870	2·8150994	0·6060046	4·0365	·247740	85
86	2·7835098	3·3707555	2·7135661	0·5872457	3·8659	·258675	86
87	2·6721659	3·2407638	2·6053912	0·5685979	3·7034	·270024	87
88	2·5539858	3·1040738	2·4902114	0·5500880	3·5489	·281781	88
89	2·4285933	2·9603328	2·3676540	0·5317395	3·4020	·293941	89
90	2·2956015	2·8091757	2·2372923	0·5135742	3·2627	·306497	90
91	2·1546125	2·6502201	2·0988167	0·4956076	3·1305	·319442	91
92	2·0052173	2·4830878	1·9517260	0·4778705	3·0052	·332759	92
93	1·8469964	2·3073634	1·7956020	0·4603670	2·8865	·346444	93
94	1·6795188	2·1226451	1·6301226	0·4431263	2·7741	·360474	94
95	1·5023429	1·9285034	1·4549972	0·4261605	2·6678	·374835	95
96	1·3150161	1·7244971	1·2695129	0·4094810	2·5673	·389510	96
97	1·1170749	1·5101695	1·0729847	0·3930946	2·4723	·404488	97
98	0·9080448	1·2850575	0·8651040	0·3770127	2·3824	·419747	98
99	0·6874403	1·0486748	0·6444386	0·3612345	2·2974	·435277	99
100	0·4547651	0·8005109	0·4132998	0·3457458	2·2169	·451081	100
101	0·2095119	0·5400165	0·1673173	0·3305046	2·1404	·467192	101
102	$\bar{1}$·9511624	0·2665844	$\bar{1}$·9084850	0·3154220	2·0674	·483702	102
103	$\bar{1}$·6791874	$\bar{1}$·9795028	$\bar{1}$·6232493	0·3003154	1·9967	·500823	103
104	$\bar{1}$·3930468	$\bar{1}$·6777894	$\bar{1}$·3424227	0·2847426	1·9264	·519108	104
105	$\bar{1}$·0921895	$\bar{1}$·3598355	$\bar{1}$·0413927	0·2676460	1·8520	·539951	105
106	$\bar{2}$·7760535	$\bar{1}$·0228406	$\bar{2}$·6989700	0·2467871	1·7652	·566517	106
107	$\bar{2}$·4440659	$\bar{2}$·6599162	$\bar{2}$·3010300	0·2158503	1·6438	·608345	107
108	$\bar{2}$·0956428	$\bar{2}$·2528530	$\bar{2}$·0000000	0·1572102	1·4362	·696289	108
109	$\bar{3}$·7301893	$\bar{3}$·7323938	...	0·0022045	1·0051	·994937	109

YEARLY TABLE:—FEMALES. Interest 5 per Cent.

Age (x)	D_x	N_x	S_x	C_x	M_x	R_x	Age (x)
0	488,255	6,914,060	112,161,292	62,641·91	159,013·89	1,573,044·71	0
1	402,363	6,425,805	105,247,232	23,726·98	96,371·98	1,414,030·82	1
2	359,475	6,023,442	98,821,427	12,113·59	72,645·00	1,317,658·84	2
3	330,244	5,663,967	92,797,985	7,604·24	60,531·41	1,245,013·84	3
4	306,914	5,333,723	87,134,018	5,168·14	52,927·17	1,184,482·43	4
5	287,131	5,026,809	81,800,295	3,631·08	47,759·03	1,131,555·26	5
6	269,827	4,739,678	76,773,486	2,711·25	44,127·95	1,083,796·23	6
7	254,267	4,469,851	72,033,808	2,199·05	41,416·70	1,039,668·28	7
8	239,960	4,215,584	67,563,957	1,755·91	39,217·65	998,251·58	8
9	226,777	3,975,624	63,348,373	1,429·19	37,461·74	959,033·93	9
10	214,549	3,748,847	59,372,749	1,195·67	36,032·55	921,572·19	10
11	203,137	3,534,298	55,623,902	1,036·27	34,836·88	885,539·64	11
12	192,427	3,331,161	52,089,604	936·02	33,800·61	850,702·76	12
13	182,328	3,138,734	48,758,443	881·34	32,864·59	816,902·15	13
14	172,765	2,956,406	45,619,709	860·54	31,983·25	784,037·56	14
15	163,677	2,783,641	42,663,303	864·91	31,122·71	752,054·31	15
16	155,018	2,619,964	39,879,662	885·25	30,257·80	720,931·60	16
17	146,751	2,464,946	37,259,698	916·22	29,372·55	690,673·80	17
18	138,847	2,318,195	34,794,752	949·76	28,456·33	661,301·25	18
19	131,285	2,179,348	32,476,557	983·30	27,506·57	632,844·92	19
20	124,050	2,048,063	30,297,209	1,011·86	26,523·27	605,338·35	20
21	117,131	1,924,013	28,249,146	980·08	25,511·41	578,815·08	21
22	110,573	1,806,882	26,325,133	948·06	24,531·33	553,303·67	22
23	104,360	1,696,309	24,518,251	915·32	23,583·27	528,772·34	23
24	98,475	1,591,949	22,821,942	882·66	22,667·95	505,189·07	24
25	92,903	1,493,474	21,229,993	850·47	21,785·29	482,521·12	25
26	87,629	1,400,571	19,736,519	818·28	20,934·82	460,735·83	26
27	82,638	1,312,942	18,335,948	786·71	20,116·54	439,801·01	27
28	77,916	1,230,304	17,023,006	756·05	19,329·83	419,684·47	28
29	73,449	1,152,388	15,792,702	726·06	18,573·78	400,354·64	29
30	69,226	1,078,939	14,640,314	697·00	17,847·72	381,780·86	30
31	65,232	1,009,713	13,561,375	668·84	17,150·72	363,933·14	31
32	61,457	944,481	12,551,662	641·39	16,481·88	346,782·42	32
33	57,889	883,024	11,607,181	615·42	15,840·49	330,300·54	33
34	54,517	825,135	10,724,157	590·10	15,225·07	314,460·05	34
35	51,331	770,618	9,899,022	566·14	14,634·97	299,234·98	35
36	48,321	719,287	9,128,404	542·80	14,068·83	284,600·01	36
37	45,477	670,966	8,409,117	520·87	13,526·03	270,531·18	37
38	42,790	625,489	7,738,151	499·65	13,005·16	257,005·15	38
39	40,253	582,699	7,112,662	479·55	12,505·51	243,999·99	39
40	37,857	542,446	6,529,963	460·23	12,025·96	231,494·48	40
41	35,594	504,589	5,987,517	442·05	11,565·73	219,468·52	41
42	33,457	468,995	5,482,928	424·43	11,123·68	207,902·79	42
43	31,439	435,538	5,013,933	407·85	10,699·25	196,779·11	43
44	29,534	404,099	4,578,395	391·99	10,291·40	186,079·86	44
45	27,736	374,565	4,174,296	376·82	9,899·41	175,788·46	45
46	26,038	346,829	3,799,731	362·51	9,522·59	165,889·05	46
47	24,436	320,791	3,452,902	348·71	9,160·08	156,366·46	47
48	22,924	296,355	3,132,111	335·58	8,811·37	147,206·38	48
49	21,496	273,431	2,835,756	323·09	8,475·79	138,395·01	49
50	20,150	251,935	2,562,325	311·11	8,152·70	129,919·22	50
51	18,879	231,785	2,310,390	299·62	7,841·59	121,766·52	51
52	17,680	212,906	2,078,605	288·66	7,541·97	113,924·93	52
53	16,550	195,226	1,865,699	278·07	7,253·31	106,382·96	53
54	15,484	178,676	1,670,473	290·11	6,975·24	99,129·65	54

YEARLY TABLE:—FEMALES. Interest 5 per Cent.

Age (x)	D_x	N_x	S_x	C_x	M_x	R_x	Age (x)
55	14,456	163,192	1,491,797	288·86	6,685·13	92,154·41	55
56	13,479	148,736	1,328,605	286·82	6,396·27	85,469·28	56
57	12,550	135,257	1,179,869	284·31	6,109·45	79,073·01	57
58	11,668	122,707	1,044,612	281·57	5,825·14	72,963·56	58
59	10,831	111,039	921,905	278·71	5,543·57	67,138·42	59
60	10,037	100,208	810,866	275·78	5,264·86	61,594·85	60
61	9,282·9	90,170·9	710,658·1	272·85	4,989·08	56,329·99	61
62	8,568·1	80,888·0	620,487·2	269·85	4,716·23	51,340·91	62
63	7,890·2	72,319·9	539,599·2	266·77	4,446·38	46,624·68	63
64	7,247·7	64,429·7	467,279·3	263·51	4,179·61	42,178·30	64
65	6,639·1	57,182·0	402,849·6	260·03	3,916·10	37,998·69	65
66	6,062·9	50,542·9	345,667·6	256·09	3,656·07	34,082·59	66
67	5,518·1	44,480·0	295,124·7	251·72	3,399·98	30,426·52	67
68	5,003·6	38,961·9	250,644·7	246·71	3,148·26	27,026·54	68
69	4,518·6	33,958·3	211,682·8	240·97	2,901·55	23,878·28	69
70	4,062·5	29,439·7	177,724·5	234·41	2,660·58	20,976·73	70
71	3,634·6	25,377·2	148,284·8	226·95	2,426·17	18,316·15	71
72	3,234·6	21,742·6	122,907·6	218·55	2,199·22	15,889·98	72
73	2,862·0	18,508·0	101,165·0	209·17	1,980·67	13,690·76	73
74	2,516·5	15,646·0	82,657·0	198·90	1,771·50	11,710·09	74
75	2,197·8	13,129·5	67,011·0	187·69	1,572·60	9,938·59	75
76	1,905·5	10,931·7	53,881·5	175·67	1,384·91	8,365·99	76
77	1,639·0	9,026·2	42,949·8	163·03	1,209·24	6,981·08	77
78	1,398·0	7,387·2	33,923·6	149·80	1,046·21	5,771·84	78
79	1,181·6	5,989·2	26,536·4	136·30	896·41	4,725·63	79
80	989·04	4,807·61	20,547·22	122·64	760·11	3,829·22	80
81	819·31	3,818·57	15,739·61	109·06	637·47	3,069·11	81
82	671·23	2,999·26	11,921·04	95·79	528·41	2,431·64	82
83	543·47	2,328·03	8,921·78	83·05	432·62	1,903·23	83
84	434·55	1,784·56	6,593·75	70·98	349·57	1,470·61	84
85	342·87	1,350·01	4,809·19	59·80	278·59	1,121·04	85
86	266·75	1,007·14	3,459·18	49·59	218·79	842·45	86
87	204·45	740·39	2,452·04	40·45	169·20	623·66	87
88	154·26	535·94	1,711·65	32·44	128·75	454·46	88
89	114·48	381·68	1,175·71	25·55	96·31	325·71	89
90	83·477	267·204	794·033	19·74	70·76	229·40	90
91	59·761	183·727	526·829	14·95	51·02	158·64	91
92	41·963	123·966	343·102	11·10	36·07	107·62	92
93	28·873	82·003	219·136	8·05	24·97	71·55	93
94	19·447	53·130	137·133	5·71	16·92	46·58	94
95	12·809	33·683	84·003	3·96	11·21	29·66	95
96	8·2422	20·8738	50·3196	2·68	7·25	18·45	96
97	5·1754	12·6316	29·4458	1·76	4·57	11·20	97
98	3·1678	7·4562	16·8142	1·13	2·81	6·63	98
99	1·8880	4·2884	9·3580	·70	1·68	3·82	99
100	1·0944	2·4004	5·0696	·43	·98	2·14	100
101	·6163	1·3060	2·6692	·25	·55	1·16	101
102	·3367	·6897	1·3632	·14	·30	·61	102
103	·1783	·3530	·6735	·08	·16	·31	103
104	·0914	·1747	·3205	·04	·08	·15	104
105	·0453	·0833	·1458	·02	·04	·07	105
106	·0217	·0380	·0625	·01	·02	·03	106
107	·0100	·0163	·0245	·01	·01	·01	107
108	·0044	·0063	·0082	...	...	...	108
109	·0019	·0019	·0019	...	...	...	109

YEARLY TABLE:—FEMALES. Interest 5 per Cent.

Age (x)	$\lambda\ D_x$	$\lambda\ N_x$	$\lambda\ M_x$	$\lambda\left(\frac{N_x}{D_x}\right)=\lambda\ A_x$	$\frac{N_x}{D_x}=A_x$	$\frac{D_x}{N_x}=a_x$	Age (x)
0	5·6886465	6·8397332	5·2014350	1·1510867	14·1608	·070618	0
1	5·6046176	6·8079275	4·9839509	1·2033099	15·9702	·062617	1
2	5·5556693	6·7798447	4·8612057	1·2241754	16·7562	·059679	2
3	5·5188354	6·7531207	4·7819808	1·2342853	17·1508	·058306	3
4	5·4870171	6·7270304	4·7236787	1·2400133	17·3785	·057542	4
5	5·4580801	6·7012924	4·6790555	1·2432123	17·5070	·057120	5
6	5·4310858	6·6757488	4·6447137	1·2446630	17·5656	·056929	6
7	5·4052893	6·6502931	4·6171755	1·2450038	17·5794	·056885	7
8	5·3801392	6·6248577	4·5934816	1·2447185	17·5678	·056922	8
9	5·3555995	6·5994053	4·5735880	1·2438058	17·5310	·057042	9
10	5·3315263	6·5738977	4·5566950	1·2423714	17·4732	·057231	10
11	5·3077884	6·5483032	4·5420392	1·2405148	17·3986	·057476	11
12	5·2842665	6·5225956	4·5289245	1·2383291	17·3113	·057766	12
13	5·2608536	6·4967545	4·5167282	1·2359009	17·2148	·058090	13
14	5·2374549	6·4707641	4·5049226	1·2333092	17·1123	·058437	14
15	5·2139881	6·4446132	4·4930774	1·2306251	17·0069	·058800	15
16	5·1903826	6·4182954	4·4808373	1·2279128	16·9010	·059168	16
17	5·1665806	6·3918074	4·4679416	1·2252268	16·7968	·059535	17
18	5·1425360	6·3651499	4·4541790	1·2226139	16·6961	·059894	18
19	5·1182154	6·3383266	4·4394364	1·2201112	16·6001	·060241	19
20	5·0935974	6·3113433	4·4236271	1·2177459	16·5100	·060570	20
21	5·0686727	6·2842081	4·4067345	1·2155354	16·4261	·060879	21
22	5·0436504	6·2569298	4·3897211	1·2132794	16·3410	·061196	22
23	5·0185341	6·2295050	4·3726041	1·2109709	16·2544	·061522	23
24	4·9933264	6·2019292	4·3554123	1·2086028	16·1660	·061858	24
25	4·9680300	6·1741977	4·3381634	1·2061677	16·0756	·062206	25
26	4·9426467	6·1463051	4·3208692	1·2036584	15·9830	·062566	26
27	4·9171780	6·1182455	4·3035533	1·2010675	15·8879	·062941	27
28	4·8916250	6·0900124	4·2862281	1·1983874	15·7902	·063330	28
29	4·8659882	6·0615988	4·2689003	1·1956106	15·6896	·063737	29
30	4·8402676	6·0329969	4·2515828	1·1927293	15·5858	·064161	30
31	4·8144630	6·0041980	4·2342823	1·1897350	15·4787	·064605	31
32	4·7885735	5·9751933	4·2170067	1·1866198	15·3681	·065070	32
33	4·7625977	5·9459725	4·1997687	1·1833748	15·2537	·065558	33
34	4·7365339	5·9165250	4·1825593	1·1799911	15·1353	·066071	34
35	4·7103798	5·8868392	4·1653918	1·1764594	15·0127	·066610	35
36	4·6841327	5·8569022	4·1482579	1·1727695	14·8857	·067179	36
37	4·6577894	5·8267005	4·1311704	1·1689111	14·7540	·067778	37
38	4·6313462	5·7962197	4·1141157	1·1648735	14·6175	·068411	38
39	4·6047991	5·7654443	4·0971015	1·1606452	14·4759	·069080	39
40	4·5781433	5·7343565	4·0801198	1·1562132	14·3289	·069789	40
41	4·5513739	5·7029377	4·0631731	1·1515638	14·1763	·070540	41
42	4·5244853	5·6711682	4·0462485	1·1466829	14·0179	·071337	42
43	4·4974716	5·6390260	4·0293533	1·1415544	13·8533	·072185	43
44	4·4703261	5·6064878	4·0124745	1·1361617	13·6824	·073087	44
45	4·4430421	5·5735272	3·9956093	1·1304851	13·5047	·074048	45
46	4·4156121	5·5401154	3·9787551	1·1245033	13·3200	·075075	46
47	4·3880282	5·5062222	3·9618993	1·1181940	13·1279	·076174	47
48	4·3602821	5·4718123	3·9450434	1·1115302	12·9280	·077352	48
49	4·3323650	5·4368478	3·9281802	1·1044828	12·7199	·078617	49
50	4·3042676	5·4012885	3·9113015	1·0970209	12·5032	·079980	50
51	4·2759801	5·3650854	3·8944041	1·0891053	12·2774	·081451	51
52	4·2474923	5·3281879	3·8774848	1·0806956	12·0419	·083043	52
53	4·2187935	5·2905377	3·8605362	1·0717442	11·7963	·084773	53
54	4·1898727	5·2520662	3·8435592	1·0621935	11·5397	·086658	54

YEARLY TABLE:—FEMALES. Interest 5 per Cent.

Age (x)	$\lambda\,D_x$	$\lambda\,N_x$	$\lambda\,M_x$	$\lambda\left(\frac{N_x}{D_x}\right)=\lambda\,A_x$	$\frac{N_x}{D_x}=A_x$	$\frac{D_x}{N_x}=a_x$	**Age** (x)
55	4·1600549	5·2126988	3·8251099	1·0526439	11·2887	·088584	55
56	4·1296575	5·1724161	3·8059268	1·0427586	11·0347	·090624	56
57	4·0986546	5·1311598	3·7860022	1·0325052	10·7772	·092789	57
58	4·0670093	5·0888695	3·7653064	1·0218602	10·5162	·095091	58
59	4·0346737	5·0454757	3·7437896	1·0108020	10·2518	·097543	59
60	4·0015891	5·0009023	3·7213868	0·9993132	9·9842	·100158	60
61	3·9676857	4·9550664	3·6980205	0·9873807	9·7136	·102948	61
62	3·9328829	4·9078841	3·6735950	0·9750012	9·4406	·105925	62
63	3·8970890	4·8592578	3·6480066	0·9621688	9·1658	·109102	63
64	3·8602017	4·8090861	3·6211357	0·9488844	8·8896	·112490	64
65	3·8221073	4·7572593	3·5928538	0·9351520	8·6130	·116104	65
66	3·7826816	4·7036601	3·5630145	0·9209785	8·3364	·119956	66
67	3·7417890	4·6481648	3·5314763	0·9063758	8·0608	·124058	67
68	3·6992834	4·5906401	3·4980706	0·8913567	7·7868	·128423	68
69	3·6550074	4·5309459	3·4626301	0·8759385	7·5152	·133064	69
70	3·6087930	4·4689334	3·4249763	0·8601404	7·2467	·137994	70
71	3·5604610	4·4044437	3·3849212	0·8439827	6·9820	·143224	71
72	3·5098214	4·3373115	3·3422687	0·8274901	6·7219	·148768	72
73	3·4566731	4·2673595	3·2968121	0·8106864	6·4668	·154637	73
74	3·4008043	4·1944033	3·2483412	0·7935990	6·2173	·160843	74
75	3·3419920	4·1182482	3·1966183	0·7762562	5·9739	·167396	75
76	3·2800024	4·0386877	3·1414215	0·7586853	5·7370	·174307	76
77	3·2145909	3·9555050	3·0825125	0·7409141	5·5070	·181588	77
78	3·1455016	3·8684799	3·0196189	0·7229783	5·2842	·189244	78
79	3·0724681	3·7773688	2·9525067	0·7049007	5·0687	·197287	79
80	2·9952126	3·6819292	2·8808764	0·6867166	4·8609	·205723	80
81	2·9134467	3·5819008	2·8044598	0·6684541	4·6607	·214559	81
82	2·8268709	3·4770141	2·7229710	0·6501432	4·4683	·223798	82
83	2·7351749	3·3669886	2·6361066	0·6318137	4·2836	·233446	83
84	2·6380373	3·2515312	2·5435342	0·6134939	4·1067	·243504	84
85	2·5351258	3·1303370	2·4449655	0·5952112	3·9374	·253974	85
86	2·4260972	3·0030898	2·3400275	0·5769926	3·7757	·264854	86
87	2·3105974	2·8694605	2·2284004	0·5588631	3·6213	·276145	87
88	2·1882613	2·7291162	2·1097472	0·5408549	3·4742	·287836	88
89	2·0587129	2·5816994	1·9836714	0·5229865	3·3342	·299926	89
90	1·9215651	2·4268430	1·8497878	0·5052779	3·2009	·312408	90
91	1·7764201	2·2641730	1·7077405	0·4877529	3·0743	·325272	91
92	1·6228690	2·0933027	1·5571461	0·4704337	2·9542	·338506	92
93	1·4604921	1·9138297	1·3974185	0·4533376	2·8401	·352097	93
94	1·2888585	1·7253398	1·2284004	0·4364813	2·7320	·366032	94
95	1·1075267	1·5274108	1·0496056	0·4198841	2·6296	·380291	95
96	0·9160440	1·3196015	0·8603380	0·4035575	2·5325	·394859	96
97	0·7139468	1·1014583	0·6599162	0·3875115	2·4407	·409721	97
98	0·5007608	0·8725175	0·4487063	0·3717567	2·3537	·424858	98
99	0·2760003	0·6322953	0·2253093	0·3562950	2·2714	·440256	99
100	0·0391692	0·3802836	$\bar{1}$·9912261	0·3411144	2·1934	·455917	100
101	$\bar{1}$·7897600	0·1159432	$\bar{1}$·7403627	0·3261832	2·1193	·471864	101
102	$\bar{1}$·5272545	$\bar{1}$·8386602	$\bar{1}$·4771213	0·3114057	2·0484	·488196	102
103	$\bar{1}$·2511235	$\bar{1}$·5477747	$\bar{1}$·2041200	0·2966512	1·9799	·505067	103
104	$\bar{2}$·9608269	$\bar{1}$·2422929	$\bar{2}$·9030900	0·2814660	1·9119	·523039	104
105	$\bar{2}$·6558137	$\bar{2}$·9206450	$\bar{2}$·6020600	0·2648313	1·8401	·543461	105
106	$\bar{2}$·3355218	$\bar{2}$·5797836	$\bar{2}$·3010300	0·2442618	1·7549	·569821	106
107	$\bar{3}$·9993782	$\bar{2}$·2121876	$\bar{2}$·0000000	0·2128094	1·6323	·612619	107
108	$\bar{3}$·6467991	$\bar{3}$·7993405	...	0·1525414	1·4208	·703815	108
109	$\bar{3}$·2771897	$\bar{3}$·2787536	...	0·0015639	1·0036	·996405	109

YEARLY TABLE:—FEMALES. Interest 5 per Cent.

A Table deduced from the **English Life Table, No. 3.**, for determining the **Value of Annuities, Assurances, &c.** on the whole of a stationary Population—or on the Part of the Population of the Age x and upwards.

Age (x)	$\frac{1}{100} v^x . Q_x = Q'_x$	$\Sigma Q'_x = Z_x$	$\frac{Z_{x+1}}{Q'_x} = A'_x$	$\lambda\left(\frac{1}{100} Q_x\right) + \lambda v^x = \lambda Q'_x$	λZ_x	$\lambda Z_{x+1} - \lambda Q'_x = \lambda A'_x$	Age (x)
0	204,321	2,927,260	13·327	5·3103120	6·4664613	1·1247259	0
1	190,344	2,722,939	13·305	5·2795386	6·4350379	1·1240272	1
2	177,593	2,532,595	13·261	5·2494265	6·4035658	1·1225648	2
3	165,775	2,355,002	13·206	5·2195181	6·3719913	1·1207727	3
4	154,777	2,189,227	13·144	5·1897057	6·3402908	1·1187413	4
5	144,511	2,034,450	13·078	5·1599021	6·3084470	1·1165457	5
6	134,915	1,889,939	13·008	5·1300592	6·2764478	1·1142239	6
7	125,935	1,755,024	12·936	5·1001452	6·2442831	1·1117996	7
8	117,528	1,629,089	12·861	5·0701402	6·2119448	1·1092855	8
9	109,655	1,511,561	12·785	5·0400282	6·1794257	1·1066907	9
10	102,281	1,401,906	12·706	5·0097945	6·1467189	1·1040236	10
11	95,376	1,299,625	12·626	4·9794382	6·1138181	1·1012781	11
12	88,902	1,204,249	12·546	4·9489128	6·0807163	1·0984972	12
13	82,841	1,115,347	12·464	4·9182445	6·0474100	1·0956481	13
14	77,164	1,032,506	12·381	4·8874149	6·0138926	1·0927440	14
15	71,848	955,342	12·297	4·8564172	5·9801589	1·0897864	15
16	66,873	883,494	12·212	4·8252476	5·9462036	1·0867729	16
17	62,216	816,621	12·126	4·7939026	5·9120205	1·0837020	17
18	57,860	754,405	12·038	4·7623803	5·8776046	1·0805689	18
19	53,787	696,545	11·950	4·7306797	5·8429492	1·0773678	19
20	49,980	642,758	11·860	4·6988004	5·8080475	1·0740916	20
21	46,424	592,778	11·769	4·6667432	5·7728920	1·0707309	21
22	43,103	546,354	11·676	4·6345050	5·7374741	1·0672797	22
23	40,002	503,251	11·581	4·6020804	5·7017847	1·0637341	23
24	37,108	463,249	11·484	4·5694639	5·6658145	1·0600894	24
25	34,407	426,141	11·385	4·5366494	5·6295533	1·0563418	25
26	31,888	391,734	11·285	4·5036300	5·5929912	1·0524867	26
27	29,539	359,846	11·182	4·4703991	5·5561167	1·0485187	27
28	27,350	330,307	11·077	4·4369495	5·5189178	1·0444315	28
29	25,309	302,957	10·970	4·4032726	5·4813810	1·0402220	29
30	23,408	277,648	10·861	4·3693602	5·4434946	1·0358837	30
31	21,637	254,240	10·750	4·3352034	5·4052439	1·0314119	31
32	19,989	232,603	10·637	4·3007920	5·3666153	1·0267999	32
33	18,455	212,614	10·521	4·2661159	5·3275919	1·0220417	33
34	17,028	194,159	10·402	4·2311639	5·2881576	1·0171307	34
35	15,701	177,131	10·282	4·1959242	5·2482946	1·0120600	35
36	14,467	161,430	10·158	4·1603840	5·2079842	1·0068240	36
37	13,321	146,963	10·033	4·1245298	5·1672080	1·0014132	37
38	12,256	133,642	9·904	4·0883469	5·1259430	0·9958217	38
39	11,267	121,386	9·773	4·0518198	5·0841686	0·9900426	39
40	10,350	110,119	9·640	4·0149316	5·0418624	0·9840640	40
41	9,499	99,769	9·503	3·9776642	4·9989956	0·9778792	41
42	8,710	90,270	9·364	3·9399981	4·9555434	0·9714791	42
43	7,978	81,560	9·223	3·9019124	4·9114772	0·9648592	43
44	7,301	73,582	9·078	3·8633841	4·8667716	0·9580050	44
45	6,674	66,281	8·931	3·8243888	4·8213891	0·9509085	45
46	6,094	59,607	8·781	3·7848994	4·7752973	0·9435599	46
47	5,558	53,513	8·629	3·7448867	4·7284593	0·9359472	47
48	5,062	47,955	8·474	3·7043189	4·6808339	0·9280675	48
49	4,604	42,893	8·316	3·6631608	4·6323864	0·9199132	49
50	4,182	38,289	8·156	3·6213740	4·5830740	0·9114695	50
51	3,792	34,107	7·994	3·5789158	4·5328435	0·9027418	51
52	3,434	30,315	7·829	3·5357391	4·4816576	0·8937063	52
53	3,103	26,881	7·663	3·4917915	4·4294454	0·8843838	53
54	2,799	23,778	7·495	3·4470142	4·3761753	0·8747706	54

YEARLY TABLE:—Females. Interest 5 per Cent.

A Table deduced from the **English Life Table, No. 3.**, for determining the **Value of Annuities, Assurance &c.** on the whole of a stationary Population—or on the Part of the Population of the Age x and upwards.

Age (x)	$\frac{1}{100}\cdot v^x.\,Q_x = Q'_x$	$\Sigma\, Q'_x = Z_x$	$\frac{Z_{x+1}}{Q'_x} = A'_x$	$\lambda\left(\frac{1}{100}Q_x\right) + \lambda v^x = \lambda\, Q'_x$	$\lambda\, Z_x$	$\lambda\, Z_{x+1} - \lambda\, Q'_x = \lambda\, A'_x$	Age (x)
55	2,520	20,979	7·326	3·4013583	4·3217848	0·8648499	55
56	2,264	18,459	7·155	3·3547838	4·2662082	0·8545972	56
57	2,029	16,195	6·983	3·3072347	4·2093810	0·8440125	57
58	1,814	14,166	6·809	3·2586496	4·1512472	0·8330877	58
59	1,618	12,352	6·634	3·2089612	4·0917373	0·8218004	59
60	1,439	10,734	6·459	3·1580961	4·0307616	0·8101533	60
61	1,276	9,295	6·283	3·1059753	3·9682494	0·7981449	61
62	1,129	8,019	6·105	3·0525127	3·9041202	0·7857065	62
63	995	6,890	5·927	2·9976158	3·8382192	0·7728680	63
64	873	5,895	5·750	2·9411850	3·7704838	0·7596917	64
65	764	5,022	5·573	2·8831136	3·7008767	0·7460921	65
66	666	4,258	5·396	2·8232866	3·6292057	0·7320497	66
67	578	3,592	5·219	2·7615819	3·5553363	0·7175613	67
68	499	3,014	5·043	2·6978686	3·4791432	0·7026694	68
69	429	2,515	4·868	2·6320076	3·4005380	0·6873067	69
70	366	2,086	4·695	2·5638507	3·3193143	0·6716777	70
71	311	1,720	4·526	2·4932406	3·2355284	0·6556704	71
72	263	1,409	4·357	2·4200109	3·1489110	0·6391737	72
73	221	1,146	4·189	2·3439849	3·0591846	0·6221568	73
74	184	925	4·026	2·2649758	2·9661417	0·6048424	74
75	152	741	3·867	2·1827867	2·8698182	0·5873286	75
76	125	589	3·709	2·0972107	2·7701153	0·5693073	76
77	102	464	3·554	2·0080290	2·6665180	0·5506796	77
78	82	362	3·405	1·9150125	2·5587086	0·5321455	78
79	66	280	3·255	1·8179195	2·4471580	0·5124943	79
80	52	214	3·112	1·7164994	2·3304138	0·4930156	80
81	41	162	2·967	1·6104879	2·2095150	0·4722975	81
82	32	121	2·817	1·4996089	2·0827854	0·4497811	82
83	24	89	2·687	1·3835744	1·9493900	0·4293390	83
84	18	65	2·570	1·2620874	1·8129134	0·4100105	84
85	14	47	2·419	1·1348348	1·6720979	0·3836791	85
86	10	33	2·292	1·0014944	1·5185139	0·3602334	86
87	7	23	2·200	0·8617274	1·3617278	0·3423926	87
88	5	16	2·119	0·7151824	1·2041200	0·3262103	88
89	4	11	1·921	0·5615120	1·0413927	0·2835860	89
90	3	7	1·591	0·4003308	0·8450980	0·2017292	90
91	2	4	1·174	0·2312508	0·6020600	0·0697792	91
92	1	2	·883	0·0538727	0·3010300	$\bar{1}\cdot9461273$	92
93	1	1	...	$\bar{1}\cdot8678035$	0·0000000	...	93
94	...	...	...	$\bar{1}\cdot6726598$	...	...	94
95	...	...	...	$\bar{1}\cdot4678855$	...	...	95
96	...	...	...	$\bar{1}\cdot2531811$	...	...	96
97	...	...	...	$\bar{1}\cdot0281406$	...	...	97
98	...	...	...	$\bar{2}\cdot7920931$	...	...	98
99	...	...	...	$\bar{2}\cdot5447239$	...	...	99
100	...	...	...	$\bar{2}\cdot2859038$	...	...	100

Note.—The first and second columns in this Table correspond in the nature of their construction and relations with the columns D and N in the previous Tables for calculating Life Annuities. The numbers in the first column are obtained by multiplying the numbers in the column Q_x of the Life Table by the successive powers of $v = \frac{1}{1\cdot05}$ (when the interest of money is 5 per cent.), and dividing by 100. The division by 100 is equivalent to cutting off 2 figures, which is done merely for the sake of convenience, as the Table in its present form is sufficiently extensive for all the purposes to which it can be applied. The v varies with the interest of money.

YEARLY TABLE:—FEMALES. Interest 6 per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	488,255	6,039,161	6·7809766	55	8,583·1	89,889·4	4·9537085
1	398,567	5,550,906	6·7443639	56	7,927·4	81,306·3	4·9101242
2	352,725	5,152,339	6·7120045	57	7,311·6	73,378·9	4·8655712
3	320,986	4,799,614	6·6812063	58	6,733·6	66,067·3	4·8199866
4	295,495	4,478,628	6·6511450	59	6,191·5	59,333·7	4·7733014
5	273,840	4,183,133	6·6215016	60	5,683·2	53,142·2	4·7254395
6	254,910	3,909,293	6·5920982	61	5,206·9	47,459·0	4·6763186
7	237,943	3,654,383	6·5628141	62	4,760·5	42,252·1	4·6258483
8	222,437	3,416,440	6·5335738	63	4,342·6	37,491·6	4·5739340
9	208,233	3,194,003	6·5043353	64	3,951·3	33,149·0	4·5204704
10	195,146	2,985,770	6·4750564	65	3,585·3	29,197·7	4·4653486
11	183,023	2,790,624	6·4457013	66	3,243·3	25,612·4	4·4084503
12	171,739	2,607,601	6·4162412	67	2,924·0	22,369·1	4·3496485
13	161,190	2,435,862	6·3866527	68	2,626·4	19,445·1	4·2888101
14	151,294	2,274,672	6·3569188	69	2,349·4	16,818·7	4·2257924
15	141,984	2,123,378	6·3270273	70	2,092·3	14,469·3	4·1604475
16	133,204	1,981,394	6·2969709	71	1,854·3	12,377·0	4·0926154
17	124,910	1,848,190	6·2667467	72	1,634·7	10,522·7	4·0221272
18	117,068	1,723,280	6·2365559	73	1,432·7	8,888·0	3·9488040
19	109,648	1,606,212	6·2058028	74	1,247·9	7,455·3	3·8724651
20	102,628	1,496,564	6·1750953	75	1,079·6	6,207·4	3·7929097
21	95,990	1,393,936	6·1442429	76	927·14	5,127·75	3·7099269
22	89,761	1,297,946	6·1132566	77	789·98	4,200·61	3·6233123
23	83,918	1,208,185	6·0821334	78	667·44	3,410·63	3·5328346
24	78,438	1,124,267	6·0508695	79	558·80	2,743·19	3·4382559
25	73,302	1,045,829	6·0194607	80	463·33	2,184·39	3·3393302
26	68,488	972,527	5·9879017	81	380·19	1,721·06	3·2357960
27	63,978	904,039	5·9561871	82	308·54	1,340·87	3·1273867
28	59,753	840,061	5·9243103	83	247·46	1,032·33	3·0138185
29	55,797	780,308	5·8922661	84	196·00	784·87	2·8947977
30	52,092	724,511	5·8600450	85	153·19	588·87	2·7700194
31	48,624	672,419	5·8276400	86	118·05	435·68	2·6391676
32	45,378	623,795	5·7950419	87	89·631	317·633	2·5019256
33	42,340	578,417	5·7622411	88	66·989	228·002	2·3579386
34	39,498	536,077	5·7292272	89	49·242	161·013	2·2068610
35	36,838	496,579	5·6959883	90	35·569	111·771	2·0483292
36	34,351	459,741	5·6625132	91	25·224	76·202	1·8819664
37	32,024	425,390	5·6287873	92	17·545	50·978	1·7073828
38	29,848	393,366	5·5947968	93	11·958	33·433	1·5241753
39	27,813	363,518	5·5605259	94	7·9781	21·4754	1·3319413
40	25,911	335,705	5·5259578	95	5·2054	13·4973	1·1302469
41	24,132	309,794	5·4910730	96	3·3178	8·2919	0·9186541
42	22,469	285,662	5·4558524	97	2·0637	4·9741	0·6967145
43	20,915	263,193	5·4202744	98	1·2512	2·9104	0·4639527
44	19,462	242,278	5·3843140	99	·7387	1·6592	0·2198987
45	18,105	222,816	5·3479464	100	·4241	·9205	$\bar{1}$·9640238
46	16,836	204,711	5·3111412	101	·2366	·4964	$\bar{1}$·6958318
47	15,651	187,875	5·2738690	102	·1280	·2598	$\bar{1}$·4146391
48	14,544	172,224	5·2360937	103	·0672	·1318	$\bar{1}$·1199154
49	13,510	157,680	5·1977766	104	·0341	·0646	$\bar{2}$·8102325
50	12,544	144,170	5·1588749	105	·0167	·0305	$\bar{2}$·4842998
51	11,642	131,626	5·1193417	106	·0079	·0138	$\bar{2}$·1398791
52	10,800	119,984	5·0791234	107	·0036	·0059	$\bar{3}$·7708520
53	10,014	109,184	5·0381591	108	·0016	·0023	$\bar{3}$·3617278
54	9,280·6	99,170·0	4·9963803	109	·0007	·0007	$\bar{4}$·8450980

YEARLY TABLE:—FEMALES. Interest 7 per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	488,255	5,365,042	6·7295731	55	5,121·0	49,992·2	4·6989022
1	394,842	4,876,787	6·6881337	56	4,685·6	44,871·2	4·6519676
2	346,163	4,481,945	6·6514666	57	4,281·2	40,185·6	4·6040705
3	312,070	4,135,782	6·6165576	58	3,906·0	35,904·4	4·5551476
4	284,603	3,823,712	6·5824851	59	3,557·9	31,998·4	4·5051282
5	261,281	3,539,109	6·5488939	60	3,235·3	28,440·5	4·4539373
6	240,946	3,277,828	6·5155862	61	2,936·4	25,205·2	4·4014901
7	222,807	3,036,882	6·4824279	62	2,659·7	22,268·8	4·3476968
8	206,340	2,814,075	6·4493357	63	2,403·5	19,609·1	4·2924576
9	191,359	2,607,735	6·4162634	64	2,166·5	17,205·6	4·2356698
10	177,657	2,416,376	6·3831645	65	1,947·4	15,039·1	4·1772219
11	165,063	2,238,719	6·3499996	66	1,745·2	13,091·7	4·1169960
12	153,438	2,073,656	6·3167368	67	1,558·7	11,346·5	4·0548620
13	142,668	1,920,218	6·2833506	68	1,386·9	9,787·8	3·9906851
14	132,658	1,777,550	6·2498218	69	1,229·1	8,400·9	3·9243258
15	123,331	1,644,892	6·2161374	70	1,084·4	7,171·8	3·8556282
16	114,623	1,521,561	6·1822894	71	952·04	6,087·40	3·7844318
17	106,482	1,406,938	6·1482750	72	831·42	5,135·36	3·7105709
18	98,863	1,300,456	6·1140957	73	721·90	4,303·94	3·6338662
19	91,732	1,201,593	6·0797574	74	622·89	3,582·04	3·5541304
20	85,057	1,109,861	6·0452687	75	533·83	2,959·15	3·4711670
21	78,811	1,024,804	6·0106408	76	454·17	2,425·32	3·3847691
22	73,008	945,993	5·9758879	77	383·37	1,971·15	3·2947197
23	67,618	872,985	5·9410068	78	320·87	1,587·78	3·2007903
24	62,612	805,367	5·9059938	79	266·14	1,266·91	3·1027457
25	57,965	742,755	5·8708456	80	218·60	1,000·77	3·0003342
26	53,653	684,790	5·8355574	81	177·70	782·17	2·8933012
27	49,651	631,137	5·8001236	82	142·86	604·47	2·7813748
28	45,939	581,486	5·7645393	83	113·51	461·61	2·6642752
29	42,496	535,547	5·7287976	84	89·064	348·095	2·5416978
30	39,304	493,051	5·6928919	85	68·960	259·031	2·4133518
31	36,344	453,747	5·6568138	86	52·647	190·071	2·2789159
32	33,601	417,403	5·6205555	87	39·598	137·424	2·1380625
33	31,058	383,802	5·5841073	88	29·319	97·826	1·9904543
34	28,703	352,744	5·5474596	89	21·350	68·507	1·8357349
35	26,520	324,041	5·5105999	90	15·278	47·157	1·6735462
36	24,498	297,521	5·4735177	91	10·733	31·879	1·5035047
37	22,625	273,023	5·4361993	92	7·3957	21·1462	1·3252323
38	20,891	250,398	5·3986308	93	4·9935	13·7505	1·1383185
39	19,285	229,507	5·3607959	94	3·3005	8·7570	0·9423553
40	17,798	210,222	5·3226781	95	2·1333	5·4565	0·7369142
41	16,421	192,424	5·2842592	96	1·3470	3·3232	0·5215565
42	15,147	176,003	5·2455201	97	·8300	1·9762	0·2958309
43	13,967	160,856	5·2064373	98	·4985	1·1462	0·0592604
44	12,876	146,889	5·1669893	99	·2916	·6477	$\bar{1}$·8113739
45	11,866	134,015	5·1271469	100	·1659	·3561	$\bar{1}$·5515720
46	10,931	122,147	5·0868829	101	·0916	·1902	$\bar{1}$·2792105
47	10,067	111,216	5·0461673	102	·0491	·0986	$\bar{2}$·9938769
48	9,267·2	101,149·1	5·0049621	103	·0255	·0495	$\bar{2}$·6946052
49	8,527·8	91,881·9	4·9632299	104	·0128	·0240	$\bar{2}$·3802112
50	7,844·1	83,354·1	4·9209269	105	·0062	·0112	$\bar{2}$·0492180
51	7,212·1	75,510·0	4·8780045	106	·0029	·0050	$\bar{3}$·6989700
52	6,628·0	68,297·9	4·8344074	107	·0013	·0021	$\bar{3}$·3222193
53	6,088·2	61,669·9	4·7900732	108	·0006	·0008	$\bar{4}$·9030900
54	5,589·5	55,581·7	4·7449319	109	·0002	·0002	$\bar{4}$·3010300

YEARLY TABLE:—FEMALES. Interest 8 per Cent.

Age (x)	D_x	N_x	$\lambda\ N_x$	Age (x)	D_x	N_x	$\lambda\ N_x$
0	488,255	4,832,628	6·6841833	55	3,070·2	28,059·3	4·4480769
1	391,186	4,344,373	6·6379271	56	2,783·1	24,989·1	4·3977506
2	339,782	3,953,187	6·5969474	57	2,519·4	22,206·0	4·3464703
3	303,481	3,613,405	6·5579166	58	2,277·3	19,686·6	4·2941707
4	274,207	3,309,924	6·5198180	59	2,055·1	17,409·3	4·2407813
5	249,407	3,035,717	6·4822613	60	1,851·5	15,354·2	4·1862272
6	227,866	2,786,310	6·4450295	61	1,664·9	13,502·7	4·1304206
7	208,760	2,558,444	6·4079759	62	1,494·0	11,837·8	4·0732710
8	191,542	2,349,684	6·3710094	63	1,337·6	10,343·8	4·0146802
9	175,991	2,158,142	6·3340800	64	1,194·5	9,006·2	3·9545416
10	161,876	1,982,151	6·2971368	65	1,063·8	7,811·7	3·8927456
11	149,008	1,820,275	6·2601370	66	944·51	6,747·90	3·8291686
12	137,231	1,671,267	6·2230458	67	835·76	5,803·39	3·7636818
13	126,417	1,534,036	6·1858356	68	736·78	4,967·63	3·6961492
14	116,459	1,407,619	6·1484852	69	646·89	4,230·85	3·6264277
15	107,268	1,291,160	6·1109801	70	565·43	3,583·96	3·5543632
16	98,771	1,183,892	6·0733120	71	491·83	3,018·53	3·4797955
17	90,906	1,085,121	6·0354782	72	425·54	2,526·70	3·4025537
18	83,621	994,215	5·9974803	73	366·06	2,101·16	3·3224591
19	76,871	910,594	5·9593248	74	312·94	1,735·10	3·2393245
20	70,617	833,723	5·9210218	75	265·71	1,422·16	3·1529485
21	64,826	763,106	5·8825849	76	223·97	1,156·45	3·0631269
22	59,497	698,280	5·8440296	77	187·30	932·48	2·9696395
23	54,594	638,783	5·8053533	78	155·32	745·18	2·8722612
24	50,084	584,189	5·7665534	79	127·63	589·86	2·7707489
25	45,938	534,105	5·7276267	80	103·86	462·23	2·6648581
26	42,126	488,167	5·6885684	81	83·648	358·374	2·5543365
27	38,623	446,041	5·6493748	82	66·626	274·726	2·4388998
28	35,405	407,418	5·6100402	83	52·446	208·100	2·3182721
29	32,448	372,013	5·5705581	84	40·770	155·654	2·1921603
30	29,733	339,565	5·5309229	85	31·275	114·884	2·0602596
31	27,239	309,832	5·4911263	86	23·656	83·609	1·9222530
32	24,950	282,593	5·4511614	87	17·628	59·953	1·7778109
33	22,849	257,643	5·4110183	88	12·931	42·325	1·6265970
34	20,920	234,794	5·3706870	89	9·3292	29·3937	1·4682543
35	19,150	213,874	5·3301580	90	6·6140	20·0645	1·3024284
36	17,526	194,724	5·2894195	91	4·6035	13·4505	1·1287385
37	16,037	177,198	5·2484588	92	3·1427	8·8470	0·9467960
38	14,670	161,161	5·2072600	93	2·1023	5·7043	0·7562024
39	13,417	146,491	5·1658110	94	1·3766	3·6020	0·5565437
40	12,268	133,074	5·1240932	95	·8816	2·2254	0·3474081
41	11,214	120,806	5·0820886	96	·5515	1·3438	0·1283346
42	10,248	109,592	5·0397788	97	·3367	·7923	$\bar{1}$·8988897
43	9,362·5	99,343·6	4·9971399	98	·2003	·4556	$\bar{1}$·6585837
44	8,550·9	89,981·1	4·9541513	99	·1161	·2553	$\bar{1}$·4070508
45	7,807·1	81,430·2	4·9107855	100	·0654	·1392	$\bar{1}$·1436392
46	7,125·7	73,623·1	4·8670141	101	·0358	·0738	$\bar{2}$·8680564
47	6,501·4	66,497·4	4·8228047	102	·0190	·0380	$\bar{2}$·5797836
48	5,929·6	59,996·0	4·7781223	103	·0098	·0190	$\bar{2}$·2787536
49	5,406·0	54,066·4	4·7329274	104	·0049	·0092	$\bar{3}$·9637878
50	4,926·6	48,660·4	4·6871757	105	·0024	·0043	$\bar{3}$·6334685
51	4,487·7	43,733·8	4·6408172	106	·0011	·0019	$\bar{3}$·2787536
52	4,086·0	39,246·1	4·5937965	107	·0005	·0008	$\bar{4}$·9030900
53	3,718·5	35,160·1	4·5460501	108	·0002	·0003	$\bar{4}$·4771213
54	3,382·3	31,441·6	4·4975047	109	·0001	·0001	$\bar{4}$·0000000

YEARLY TABLE:—FEMALES. Interest 9 per Cent.

Age (x)	D_x	N_x	$\lambda\ N_x$	Age (x)	D_x	N_x	$\lambda\ N_x$
0	488,255	4,403,034	6·6437520	55	1,849·3	15,886·4	4·2010255
1	387,597	3,914,779	6·5927073	56	1,661·0	14,037·1	4·1472774
2	333,576	3,527,182	6·5474279	57	1,489·8	12,376·1	4·0925838
3	295,205	3,193,606	6·5042813	58	1,334·3	10,886·3	4·0368803
4	264,282	2,898,401	6·4621585	59	1,193·1	9,552·0	3·9800943
5	238,174	2,634,119	6·4206354	60	1,065·0	8,358·9	3·9221491
6	215,607	2,395,945	6·3794768	61	948·89	7,293·86	3·8629574
7	195,717	2,180,338	6·3385239	62	843·68	6,344·97	3·8024296
8	177,927	1,984,621	6·2976776	63	748·42	5,501·29	3·7404645
9	161,981	1,806,694	6·2568846	64	662·25	4,752·87	3·6769559
10	147,623	1,644,713	6·2160901	65	584·37	4,090·62	3·6117891
11	134,642	1,497,090	6·1752479	66	514·08	3,506·25	3·5448429
12	122,863	1,362,448	6·1343200	67	450·71	2,992·17	3·4759863
13	112,142	1,239,585	6·0932764	68	393·69	2,541·46	3·4050833
14	102,361	1,127,443	6·0520947	69	342·48	2,147·77	3·3319877
15	93,418	1,025,082	6·0107586	70	296·61	1,805·29	3·2565470
16	85,229	931,664	5·9692593	71	255·63	1,508·68	3·1785971
17	77,723	846,435	5·9275936	72	219·15	1,253·05	3·0979685
18	70,838	768,712	5·8857636	73	186·79	1,033·90	3·0144785
19	64,522	697,874	5·8437770	74	158·22	847·11	2·9279398
20	58,729	633,352	5·8016452	75	133·11	688·89	2·8381499
21	53,418	574,623	5·7593830	76	111·17	555·78	2·7449029
22	48,577	521,205	5·7170086	77	92·114	444·611	2·6479802
23	44,165	472,628	5·6745195	78	75·683	352·497	2·5471554
24	40,145	428,463	5·6319133	79	61·621	276·814	2·4421881
25	36,484	388,318	5·5891876	80	49·686	215·193	2·3328282
26	33,150	351,834	5·5463378	81	39·649	165·507	2·2188163
27	30,114	318,684	5·5033602	82	31·291	125·858	2·0998808
28	27,352	288,570	5·4602512	83	24·405	94·567	1·9757396
29	24,838	261,218	5·4170031	84	18·798	70·162	1·8461020
30	22,550	236,380	5·3736107	85	14·288	51·364	1·7106588
31	20,470	213,830	5·3300686	86	10·708	37·076	1·5690929
32	18,577	193,360	5·2863666	87	7·9061	26·3677	1·4210723
33	16,857	174,783	5·2424992	88	5·7463	18·4616	1·2662693
34	15,292	157,926	5·1984536	89	4·1077	12·7153	1·1043266
35	13,870	142,634	5·1542231	90	2·8855	8·6076	0·9348821
36	12,577	128,764	5·1097945	91	1·9899	5·7221	0·7575554
37	11,403	116,187	5·0651577	92	1·3460	3·7322	0·5719649
38	10,336	104,784	5·0202950	93	·8921	2·3862	0·3777068
39	9,365·9	94,447·6	4·9751910	94	·5788	1·4941	0·1743797
40	8,485·1	85,081·7	4·9298362	95	·3673	·9153	$\bar{1}$·9615635
41	7,685·1	76,596·6	4·8842095	96	·2277	·5480	$\bar{1}$·7387806
42	6,958·6	68,911·5	4·8382918	97	·1377	·3203	$\bar{1}$·5055569
43	6,299·0	61,952·9	4·7920616	98	·0812	·1826	$\bar{1}$·2615008
44	5,700·2	55,653·9	4·7454956	99	·0466	·1014	$\bar{1}$·0060380
45	5,156·7	49,953·7	4·6985677	100	·0260	·0548	$\bar{2}$·7387806
46	4,663·4	44,797·0	4·6512489	101	·0141	·0288	$\bar{2}$·4593925
47	4,215·8	40,133·6	4·6035081	102	·0074	·0147	$\bar{2}$·1673173
48	3,809·8	35,917·8	4·5553097	103	·0038	·0073	$\bar{3}$·8633229
49	3,441·5	32,108·0	4·5066133	104	·0019	·0035	$\bar{3}$·5440680
50	3,107·5	28,666·5	4·4573747	105	·0009	·0016	$\bar{3}$·2041200
51	2,804·7	25,559·0	4·4075439	106	·0004	·0007	$\bar{4}$·8450980
52	2,530·2	22,754·3	4·3570635	107	·0002	·0003	$\bar{4}$·4771213
53	2,281·5	20,224·1	4·3058692	108	·0001	·0001	$\bar{4}$·0000000
54	2,056·2	17,942·6	4·2538854	109	...	...	...

YEARLY TABLE:—FEMALES. Interest 10 per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	488,255	4,049,914	6·6074458	55	1,119·1	9,069·4	3·9575786
1	384,073	3,561,659	6·5516523	56	996·02	7,950·26	3·9003813
2	327,539	3,177,586	6·5020973	57	885·24	6,954·24	3·8422497
3	287,227	2,850,047	6·4548521	58	785·62	6,069·00	3·7831171
4	254,802	2,562,820	6·4087181	59	696·10	5,283·38	3·7229119
5	227,543	2,308,018	6·3632392	60	615·72	4,587·28	3·6615552
6	204,111	2,080,475	6·3181625	61	543·60	3,971·56	3·5989611
7	183,597	1,876,364	6·2733171	62	478·93	3,427·96	3·5350357
8	165,391	1,692,767	6·2285972	63	420·99	2,949·03	3·4696792
9	149,200	1,527,376	6·1839460	64	369·13	2,528·04	3·4027839
10	134,739	1,378,176	6·1393047	65	322·77	2,158·91	3·3342345
11	121,773	1,243,437	6·0946238	66	281·36	1,836·14	3·2639058
12	110,110	1,121,664	6·0498628	67	244·43	1,554·78	3·1916689
13	99,589	1,011,554	6·0049891	68	211·57	1,310·35	3·1173873
14	90,076	911,965	5·9599782	69	182·38	1,098·78	3·0409109
15	81,459	821,889	5·9148132	70	156·52	916·40	2·9620851
16	73,642	740,430	5·8694840	71	133·67	759·88	2·8807450
17	66,546	666,788	5·8239878	72	113·55	626·21	2·7967200
18	60,100	600,242	5·7783264	73	95·902	512·658	2·7098277
19	54,244	540,142	5·7325079	74	80·492	416·756	2·6198818
20	48,925	485,898	5·6865451	75	67·102	336·264	2·5266804
21	44,096	436,973	5·6404546	76	55·532	269·162	2·4300137
22	39,735	392,877	5·5942566	77	45·596	213·630	2·3296622
23	35,798	353,142	5·5479494	78	37·123	168·034	2·2253972
24	32,244	317,344	5·5015303	79	29·950	130·911	2·1169761
25	29,037	285,100	5·4549972	80	23·930	100·961	2·0041536
26	26,143	256,063	5·4083468	81	18·922	77·031	1·8866655
27	23,534	229,920	5·3615768	82	14·798	58·109	1·7642434
28	21,180	206,386	5·3146803	83	11·437	43·311	1·6365982
29	19,059	185,206	5·2676550	84	8·7288	31·8743	1·5034407
30	17,146	166,147	5·2204925	85	6·5741	23·1455	1·3644666
31	15,423	149,001	5·1731892	86	4·8821	16·5714	1·2193592
32	13,870	133,578	5·1257349	87	3·5719	11·6893	1·0677885
33	12,471	119,708	5·0781232	88	2·5725	8·1174	0·9094169
34	11,210	107,237	5·0303447	89	1·8223	5·5449	0·7438937
35	10,075	96,027	4·9823934	90	1·2684	3·7226	0·5708464
36	9,053·4	85,951·8	4·9342550	91	·8668	2·4542	0·3899100
37	8,133·2	76,898·4	4·8859173	92	·5810	1·5874	0·2006864
38	7,305·0	68,765·2	4·8373687	93	·3816	1·0064	0·0027706
39	6,559·4	61,460·2	4·7885940	94	·2453	·6248	$\bar{1}$·7957410
40	5,888·5	54,900·8	4·7395787	95	·1542	·3795	$\bar{1}$·5792118
41	5,284·9	49,012·3	4·6903051	96	·0947	·2253	$\bar{1}$·3527612
42	4,741·8	43,727·4	4·6407537	97	·0568	·1306	$\bar{1}$·1159432
43	4,253·3	38,985·6	4·5909042	98	·0332	·0738	$\bar{2}$·8680564
44	3,814·0	34,732·3	4·5407336	99	·0189	·0406	$\bar{2}$·6085260
45	3,418·9	30,918·3	4·4902156	100	·0104	·0217	$\bar{2}$·3364597
46	3,063·8	27,499·4	4·4393232	101	·0056	·0113	$\bar{2}$·0530784
47	2,744·5	24,435·6	4·3880230	102	·0029	·0057	$\bar{3}$·7558749
48	2,457·6	21,691·1	4·3362816	103	·0015	·0028	$\bar{3}$·4471580
49	2,199·9	19,233·5	4·2840583	104	·0007	·0013	$\bar{3}$·1139434
50	1,968·3	17,033·6	4·2313064	105	·0003	·0006	$\bar{4}$·7781513
51	1,760·4	15,065·3	4·1779778	106	·0002	·0003	$\bar{4}$·4771213
52	1,573·7	13,304·9	4·1240116	107	·0001	·0001	$\bar{4}$·0000000
53	1,406·1	11,731·2	4·0693424	108	...	...	...
54	1,255·7	10,325·1	4·0138943	109	...	...	...

SINGLE LIVES.

HALF-YEARLY TABLE.

Males and **Females.**

For Note as to Interest see page 128.)

HALF-YEARLY TABLE:—MALES. Interest 3 per Cent.

Logarithms of the Series $p_x = \lambda$ probability of living *half a year* after Age x.

Age (x)	$\lambda\ p_x$	Age (x)	$\lambda\ p_x$	Age (x)	$\lambda\ p_x$	Age (x)	$\lambda\ p_x$
0	$\bar{1}.9466587$	28	$\bar{1}.9978960$	56	$\bar{1}.9943906$	84	$\bar{1}.9563335$
0½	$\bar{1}.9757577$	28½	$\bar{1}.9978758$	56½	$\bar{1}.9942400$	84½	$\bar{1}.9547622$
1	$\bar{1}.9834257$	29	$\bar{1}.9978551$	57	$\bar{1}.9940818$	85	$\bar{1}.9531474$
1½	$\bar{1}.9877120$	29½	$\bar{1}.9978341$	57½	$\bar{1}.9939153$	85½	$\bar{1}.9514879$
2	$\bar{1}.9910040$	30	$\bar{1}.9978124$	58	$\bar{1}.9937400$	86	$\bar{1}.9497835$
2½	$\bar{1}.9933013$	30½	$\bar{1}.9977902$	58½	$\bar{1}.9935550$	86½	$\bar{1}.9480333$
3	$\bar{1}.9943674$	31	$\bar{1}.9977673$	59	$\bar{1}.9933599$	87	$\bar{1}.9462369$
3½	$\bar{1}.9951495$	31½	$\bar{1}.9977438$	59½	$\bar{1}.9931539$	87½	$\bar{1}.9443933$
4	$\bar{1}.9958156$	32	$\bar{1}.9977195$	60	$\bar{1}.9929365$	88	$\bar{1}.9425023$
4½	$\bar{1}.9963757$	32½	$\bar{1}.9976944$	60½	$\bar{1}.9927068$	88½	$\bar{1}.9405629$
5	$\bar{1}.9968397$	33	$\bar{1}.9976685$	61	$\bar{1}.9924645$	89	$\bar{1}.9385745$
5½	$\bar{1}.9972177$	33½	$\bar{1}.9976417$	61½	$\bar{1}.9922086$	89½	$\bar{1}.9365367$
6	$\bar{1}.9975196$	34	$\bar{1}.9976139$	62	$\bar{1}.9919388$	90	$\bar{1}.9344485$
6½	$\bar{1}.9977554$	34½	$\bar{1}.9975852$	62½	$\bar{1}.9916541$	90½	$\bar{1}.9323096$
7	$\bar{1}.9979087$	35	$\bar{1}.9975554$	63	$\bar{1}.9913542$	91	$\bar{1}.9301191$
7½	$\bar{1}.9980957$	35½	$\bar{1}.9975244$	63½	$\bar{1}.9910382$	91½	$\bar{1}.9278764$
8	$\bar{1}.9982623$	36	$\bar{1}.9974923$	64	$\bar{1}.9907056$	92	$\bar{1}.9255810$
8½	$\bar{1}.9984090$	36½	$\bar{1}.9974591$	64½	$\bar{1}.9903556$	92½	$\bar{1}.9232321$
9	$\bar{1}.9985368$	37	$\bar{1}.9974245$	65	$\bar{1}.9899878$	93	$\bar{1}.9208291$
9½	$\bar{1}.9986466$	37½	$\bar{1}.9973887$	65½	$\bar{1}.9896013$	93½	$\bar{1}.9183714$
10	$\bar{1}.9987390$	38	$\bar{1}.9973515$	66	$\bar{1}.9891955$	94	$\bar{1}.9158583$
10½	$\bar{1}.9988151$	38½	$\bar{1}.9973128$	66½	$\bar{1}.9887700$	94½	$\bar{1}.9132892$
11	$\bar{1}.9988755$	39	$\bar{1}.9972727$	67	$\bar{1}.9883239$	95	$\bar{1}.9106634$
11½	$\bar{1}.9989211$	39½	$\bar{1}.9972310$	67½	$\bar{1}.9878566$	95½	$\bar{1}.9079803$
12	$\bar{1}.9989528$	40	$\bar{1}.9971879$	68	$\bar{1}.9873674$	96	$\bar{1}.9052392$
12½	$\bar{1}.9989713$	40½	$\bar{1}.9971430$	68½	$\bar{1}.9868559$	96½	$\bar{1}.9024396$
13	$\bar{1}.9989776$	41	$\bar{1}.9970966$	69	$\bar{1}.9863212$	97	$\bar{1}.8995805$
13½	$\bar{1}.9989722$	41½	$\bar{1}.9970483$	69½	$\bar{1}.9857628$	97½	$\bar{1}.8966618$
14	$\bar{1}.9989563$	42	$\bar{1}.9969982$	70	$\bar{1}.9851800$	98	$\bar{1}.8936823$
14½	$\bar{1}.9989304$	42½	$\bar{1}.9969464$	70½	$\bar{1}.9845720$	98½	$\bar{1}.8906418$
15	$\bar{1}.9988957$	43	$\bar{1}.9968927$	71	$\bar{1}.9839385$	99	$\bar{1}.8875394$
15½	$\bar{1}.9988527$	43½	$\bar{1}.9968370$	71½	$\bar{1}.9832786$	99½	$\bar{1}.8843744$
16	$\bar{1}.9988024$	44	$\bar{1}.9967793$	72	$\bar{1}.9825917$	100	$\bar{1}.8811465$
16½	$\bar{1}.9987454$	44½	$\bar{1}.9967196$	72½	$\bar{1}.9818771$	100½	$\bar{1}.8778546$
17	$\bar{1}.9986828$	45	$\bar{1}.9966578$	73	$\bar{1}.9811344$	101	$\bar{1}.8744985$
17½	$\bar{1}.9986154$	45½	$\bar{1}.9965938$	73½	$\bar{1}.9803626$	101½	$\bar{1}.8710771$
18	$\bar{1}.9985437$	46	$\bar{1}.9965277$	74	$\bar{1}.9795614$	102	$\bar{1}.8675902$
18½	$\bar{1}.9984690$	46½	$\bar{1}.9964592$	74½	$\bar{1}.9787299$	102½	$\bar{1}.8640368$
19	$\bar{1}.9983918$	47	$\bar{1}.9963886$	75	$\bar{1}.9778676$	103	$\bar{1}.8604165$
19½	$\bar{1}.9983130$	47½	$\bar{1}.9963155$	75½	$\bar{1}.9769737$	103½	$\bar{1}.8567286$
20	$\bar{1}.9982040$	48	$\bar{1}.9962400$	76	$\bar{1}.9760478$	104	$\bar{1}.8529722$
20½	$\bar{1}.9981834$	48½	$\bar{1}.9961620$	76½	$\bar{1}.9750889$	104½	$\bar{1}.8491470$
21	$\bar{1}.9981634$	49	$\bar{1}.9960816$	77	$\bar{1}.9740968$	105	$\bar{1}.8452522$
21½	$\bar{1}.9981437$	49½	$\bar{1}.9959986$	77½	$\bar{1}.9730704$	105½	$\bar{1}.8412872$
22	$\bar{1}.9981242$	50	$\bar{1}.9959130$	78	$\bar{1}.9720095$	106	$\bar{1}.8372514$
22½	$\bar{1}.9981051$	50½	$\bar{1}.9958246$	78½	$\bar{1}.9709130$	106½	$\bar{1}.8331438$
23	$\bar{1}.9980861$	51	$\bar{1}.9956194$	79	$\bar{1}.9697806$	107	$\bar{1}.8289644$
23½	$\bar{1}.9980673$	51½	$\bar{1}.9955095$	79½	$\bar{1}.9686116$	107½	$\bar{1}.8247119$
24	$\bar{1}.9980486$	52	$\bar{1}.9953985$	80	$\bar{1}.9674052$	108	$\bar{1}.8203861$
24½	$\bar{1}.9980299$	52½	$\bar{1}.9952856$	80½	$\bar{1}.9661608$	108½	$\bar{1}.8159862$
25	$\bar{1}.9980112$	53	$\bar{1}.9951702$	81	$\bar{1}.9648779$	109	...
25½	$\bar{1}.9979925$	53½	$\bar{1}.9950518$	81½	$\bar{1}.9635557$		
26	$\bar{1}.9979736$	54	$\bar{1}.9949297$	82	$\bar{1}.9621936$		
26½	$\bar{1}.9979546$	54½	$\bar{1}.9948031$	82½	$\bar{1}.9607910$		
27	$\bar{1}.9979353$	55	$\bar{1}.9946715$	83	$\bar{1}.9593473$		
27½	$\bar{1}.9979159$	55½	$\bar{1}.9945342$	83½	$\bar{1}.9578616$		

Note.—$\lambda\, p_x = \lambda\, l_{x+\frac{1}{2}} - \lambda\, l_x$.

HALF-YEARLY TABLE:—FEMALES. Interest 3 per Cent.

Logarithms of the Series $p_x = \lambda$ probability of living *half a year* after Age x.

Age (x)	$\lambda . p_x$	**Age** (x)	$\lambda . p_x$	**Age** (x)	$\lambda . p_x$	**Age** (x)	$\lambda . p_x$
0	$\bar{1}$·9576030	28	$\bar{1}$·9977867	56	$\bar{1}$·9951709	84	$\bar{1}$·9598818
0½	$\bar{1}$·9795574	28½	$\bar{1}$·9977658	56½	$\bar{1}$·9950155	84½	$\bar{1}$·9583960
1	$\bar{1}$·9831708	29	$\bar{1}$·9977449	57	$\bar{1}$·9948550	85	$\bar{1}$·9568669
1½	$\bar{1}$·9890702	29½	$\bar{1}$·9977239	57½	$\bar{1}$·9946889	85½	$\bar{1}$·9552939
2	$\bar{1}$·9920988	30	$\bar{1}$·9977029	58	$\bar{1}$·9945166	86	$\bar{1}$·9536762
2½	$\bar{1}$·9922566	30½	$\bar{1}$·9976818	58½	$\bar{1}$·9943371	86½	$\bar{1}$·9520133
3	$\bar{1}$·9942591	31	$\bar{1}$·9976606	59	$\bar{1}$·9941501	87	$\bar{1}$·9503044
3½	$\bar{1}$·9951119	31½	$\bar{1}$·9976392	59½	$\bar{1}$·9939546	87½	$\bar{1}$·9485488
4	$\bar{1}$·9958292	32	$\bar{1}$·9976176	60	$\bar{1}$·9937500	88	$\bar{1}$·9467459
4½	$\bar{1}$·9964231	32½	$\bar{1}$·9975959	60½	$\bar{1}$·9935359	88½	$\bar{1}$·9448949
5	$\bar{1}$·9969058	33	$\bar{1}$·9975739	61	$\bar{1}$·9933111	89	$\bar{1}$·9429953
5½	$\bar{1}$·9972892	33½	$\bar{1}$·9975516	61½	$\bar{1}$·9930754	89½	$\bar{1}$·9410463
6	$\bar{1}$·9975857	34	$\bar{1}$·9975290	62	$\bar{1}$·9928277	90	$\bar{1}$·9390471
6½	$\bar{1}$·9978071	34½	$\bar{1}$·9975062	62½	$\bar{1}$·9925677	90½	$\bar{1}$·9369972
7	$\bar{1}$·9979339	35	$\bar{1}$·9974829	63	$\bar{1}$·9922946	91	$\bar{1}$·9348959
7½	$\bar{1}$·9981053	35½	$\bar{1}$·9974593	63½	$\bar{1}$·9920074	91½	$\bar{1}$·9327423
8	$\bar{1}$·9982578	36	$\bar{1}$·9974352	64	$\bar{1}$·9917059	92	$\bar{1}$·9305361
8½	$\bar{1}$·9983918	36½	$\bar{1}$·9974108	64½	$\bar{1}$·9913890	92½	$\bar{1}$·9282763
9	$\bar{1}$·9985082	37	$\bar{1}$·9973858	65	$\bar{1}$·9910564	93	$\bar{1}$·9259623
9½	$\bar{1}$·9986079	37½	$\bar{1}$·9973603	65½	$\bar{1}$·9907072	93½	$\bar{1}$·9235934
10	$\bar{1}$·9986915	38	$\bar{1}$·9973343	66	$\bar{1}$·9903406	94	$\bar{1}$·9211691
10½	$\bar{1}$·9987599	38½	$\bar{1}$·9973078	66½	$\bar{1}$·9899561	94½	$\bar{1}$·9186884
11	$\bar{1}$·9988136	39	$\bar{1}$·9972807	67	$\bar{1}$·9895530	95	$\bar{1}$·9161509
11½	$\bar{1}$·9988538	39½	$\bar{1}$·9972529	67½	$\bar{1}$·9891307	95½	$\bar{1}$·9135557
12	$\bar{1}$·9988807	40	$\bar{1}$·9972245	68	$\bar{1}$·9886882	96	$\bar{1}$·9109023
12½	$\bar{1}$·9988957	40½	$\bar{1}$·9971954	68½	$\bar{1}$·9882251	96½	$\bar{1}$·9081899
13	$\bar{1}$·9988990	41	$\bar{1}$·9971656	69	$\bar{1}$·9877407	97	$\bar{1}$·9054178
13½	$\bar{1}$·9988916	41½	$\bar{1}$·9971351	69½	$\bar{1}$·9872342	97½	$\bar{1}$·9025854
14	$\bar{1}$·9988745	42	$\bar{1}$·9971038	70	$\bar{1}$·9867050	98	$\bar{1}$·8996920
14½	$\bar{1}$·9988479	42½	$\bar{1}$·9970717	70½	$\bar{1}$·9861523	98½	$\bar{1}$·8967369
15	$\bar{1}$·9988132	43	$\bar{1}$·9970388	71	$\bar{1}$·9855756	99	$\bar{1}$·8937193
15½	$\bar{1}$·9987707	43½	$\bar{1}$·9970051	71½	$\bar{1}$·9849741	99½	$\bar{1}$·8906388
16	$\bar{1}$·9987214	44	$\bar{1}$·9969704	72	$\bar{1}$·9843471	100	$\bar{1}$·8874945
16½	$\bar{1}$·9986658	44½	$\bar{1}$·9969349	72½	$\bar{1}$·9836939	100½	$\bar{1}$·8842857
17	$\bar{1}$·9986051	45	$\bar{1}$·9968984	73	$\bar{1}$·9830140	101	$\bar{1}$·8810117
17½	$\bar{1}$·9985397	45½	$\bar{1}$·9968609	73½	$\bar{1}$·9823065	101½	$\bar{1}$·8776721
18	$\bar{1}$·9984705	46	$\bar{1}$·9968224	74	$\bar{1}$·9815708	102	$\bar{1}$·8742658
18½	$\bar{1}$·9983982	46½	$\bar{1}$·9967830	74½	$\bar{1}$·9808062	102½	$\bar{1}$·8707925
19	$\bar{1}$·9983237	47	$\bar{1}$·9967424	75	$\bar{1}$·9800121	103	$\bar{1}$·8672513
19½	$\bar{1}$·9982475	47½	$\bar{1}$·9967008	75½	$\bar{1}$·9791876	103½	$\bar{1}$·8636415
20	$\bar{1}$·9981448	48	$\bar{1}$·9966580	76	$\bar{1}$·9783324	104	$\bar{1}$·8599625
20½	$\bar{1}$·9981198	48½	$\bar{1}$·9966141	76½	$\bar{1}$·9774454	104½	$\bar{1}$·8562136
21	$\bar{1}$·9980955	49	$\bar{1}$·9965691	77	$\bar{1}$·9765261	105	$\bar{1}$·8523941
21½	$\bar{1}$·9980716	49½	$\bar{1}$·9965228	77½	$\bar{1}$·9755739	105½	$\bar{1}$·8485033
22	$\bar{1}$·9980481	50	$\bar{1}$·9964753	78	$\bar{1}$·9745880	106	$\bar{1}$·8445405
22½	$\bar{1}$·9980248	50½	$\bar{1}$·9964265	78½	$\bar{1}$·9735678	106½	$\bar{1}$·8405052
23	$\bar{1}$·9980021	51	$\bar{1}$·9963764	79	$\bar{1}$·9725124	107	$\bar{1}$·8363965
23½	$\bar{1}$·9979796	51½	$\bar{1}$·9963251	79½	$\bar{1}$·9714214	107½	$\bar{1}$·8322138
24	$\bar{1}$·9979574	52	$\bar{1}$·9962723	80	$\bar{1}$·9702939	108	$\bar{1}$·8279563
24½	$\bar{1}$·9979355	52½	$\bar{1}$·9962183	80½	$\bar{1}$·9691295	108½	$\bar{1}$·8236235
25	$\bar{1}$·9979137	53	$\bar{1}$·9961627	81	$\bar{1}$·9679271	109	…
25½	$\bar{1}$·9978923	53½	$\bar{1}$·9961057	81½	$\bar{1}$·9666864		
26	$\bar{1}$·9978709	54	$\bar{1}$·9957570	82	$\bar{1}$·9654065		
26½	$\bar{1}$·9978497	54½	$\bar{1}$·9956145	82½	$\bar{1}$·9640868		
27	$\bar{1}$·9978286	55	$\bar{1}$·9954698	83	$\bar{1}$·9627266		
27½	$\bar{1}$·9978076	55½	$\bar{1}$·9953222	83½	$\bar{1}$·9613251		

HALF-YEARLY TABLE:—MALES. Interest 3 per Cent.

Logarithms of the Series $vp_x = \lambda\left(\frac{1}{1+\frac{i}{2}}\cdot\frac{l_{x+\frac{1}{2}}}{l_x}\right)$

Age (x)	$\lambda\ vp_x$	Age (x)	$\lambda\ vp_x$	Age (x)	$\lambda\ vp_x$	Age (x)	$\lambda\ vp_x$
0	$\bar{1}$·9401927	28	$\bar{1}$·9914300	56	$\bar{1}$·9879246	84	$\bar{1}$·9498675
0½	$\bar{1}$·9692917	28½	$\bar{1}$·9914098	56½	$\bar{1}$·9877740	84½	$\bar{1}$·9482962
1	$\bar{1}$·9769597	29	$\bar{1}$·9913891	57	$\bar{1}$·9876158	85	$\bar{1}$·9466814
1½	$\bar{1}$·9812460	29½	$\bar{1}$·9913681	57½	$\bar{1}$·9874493	85½	$\bar{1}$·9450219
2	$\bar{1}$·9845380	30	$\bar{1}$·9913464	58	$\bar{1}$·9872740	86	$\bar{1}$·9433175
2½	$\bar{1}$·9868353	30½	$\bar{1}$·9913242	58½	$\bar{1}$·9870890	86½	$\bar{1}$·9415673
3	$\bar{1}$·9879014	31	$\bar{1}$·9913013	59	$\bar{1}$·9868939	87	$\bar{1}$·9397709
3½	$\bar{1}$·9886835	31½	$\bar{1}$·9912778	59½	$\bar{1}$·9866879	87½	$\bar{1}$·9379273
4	$\bar{1}$·9893496	32	$\bar{1}$·9912535	60	$\bar{1}$·9864705	88	$\bar{1}$·9360363
4½	$\bar{1}$·9899097	32½	$\bar{1}$·9912284	60½	$\bar{1}$·9862408	88½	$\bar{1}$·9340969
5	$\bar{1}$·9903737	33	$\bar{1}$·9912025	61	$\bar{1}$·9859985	89	$\bar{1}$·9321085
5½	$\bar{1}$·9907517	33½	$\bar{1}$·9911757	61½	$\bar{1}$·9857426	89½	$\bar{1}$·9300707
6	$\bar{1}$·9910536	34	$\bar{1}$·9911479	62	$\bar{1}$·9854728	90	$\bar{1}$·9279825
6½	$\bar{1}$·9912894	34½	$\bar{1}$·9911192	62½	$\bar{1}$·9851881	90½	$\bar{1}$·9258436
7	$\bar{1}$·9914427	35	$\bar{1}$·9910894	63	$\bar{1}$·9848882	91	$\bar{1}$·9236531
7½	$\bar{1}$·9916297	35½	$\bar{1}$·9910584	63½	$\bar{1}$·9845722	91½	$\bar{1}$·9214104
8	$\bar{1}$·9917963	36	$\bar{1}$·9910263	64	$\bar{1}$·9842396	92	$\bar{1}$·9191150
8½	$\bar{1}$·9919430	36½	$\bar{1}$·9909931	64½	$\bar{1}$·9838896	92½	$\bar{1}$·9167661
9	$\bar{1}$·9920708	37	$\bar{1}$·9909585	65	$\bar{1}$·9835218	93	$\bar{1}$·9143631
9½	$\bar{1}$·9921806	37½	$\bar{1}$·9909227	65½	$\bar{1}$·9831353	93½	$\bar{1}$·9119054
10	$\bar{1}$·9922730	38	$\bar{1}$·9908855	66	$\bar{1}$·9827295	94	$\bar{1}$·9093923
10½	$\bar{1}$·9923491	38½	$\bar{1}$·9908468	66½	$\bar{1}$·9823040	94½	$\bar{1}$·9068232
11	$\bar{1}$·9924095	39	$\bar{1}$·9908067	67	$\bar{1}$·9818579	95	$\bar{1}$·9041974
11½	$\bar{1}$·9924551	39½	$\bar{1}$·9907650	67½	$\bar{1}$·9813906	95½	$\bar{1}$·9015143
12	$\bar{1}$·9924868	40	$\bar{1}$·9907219	68	$\bar{1}$·9809014	96	$\bar{1}$·8987732
12½	$\bar{1}$·9925053	40½	$\bar{1}$·9906770	68½	$\bar{1}$·9803899	96½	$\bar{1}$·8959736
13	$\bar{1}$·9925116	41	$\bar{1}$·9906306	69	$\bar{1}$·9798552	97	$\bar{1}$·8931145
13½	$\bar{1}$·9925062	41½	$\bar{1}$·9905823	69½	$\bar{1}$·9792968	97½	$\bar{1}$·8901958
14	$\bar{1}$·9924903	42	$\bar{1}$·9905322	70	$\bar{1}$·9787140	98	$\bar{1}$·8872163
14½	$\bar{1}$·9924644	42½	$\bar{1}$·9904804	70½	$\bar{1}$·9781060	98½	$\bar{1}$·8841758
15	$\bar{1}$·9924297	43	$\bar{1}$·9904267	71	$\bar{1}$·9774725	99	$\bar{1}$·8810734
15½	$\bar{1}$·9923867	43½	$\bar{1}$·9903710	71½	$\bar{1}$·9768126	99½	$\bar{1}$·8779084
16	$\bar{1}$·9923364	44	$\bar{1}$·9903133	72	$\bar{1}$·9761257	100	$\bar{1}$·8746805
16½	$\bar{1}$·9922794	44½	$\bar{1}$·9902536	72½	$\bar{1}$·9754111	100½	$\bar{1}$·8713886
17	$\bar{1}$·9922168	45	$\bar{1}$·9901918	73	$\bar{1}$·9746684	101	$\bar{1}$·8680325
17½	$\bar{1}$·9921494	45½	$\bar{1}$·9901278	73½	$\bar{1}$·9738966	101½	$\bar{1}$·8646111
18	$\bar{1}$·9920777	46	$\bar{1}$·9900617	74	$\bar{1}$·9730954	102	$\bar{1}$·8611242
18½	$\bar{1}$·9920030	46½	$\bar{1}$·9899932	74½	$\bar{1}$·9722639	102½	$\bar{1}$·8575708
19	$\bar{1}$·9919258	47	$\bar{1}$·9899226	75	$\bar{1}$·9714016	103	$\bar{1}$·8539505
19½	$\bar{1}$·9918470	47½	$\bar{1}$·9898495	75½	$\bar{1}$·9705077	103½	$\bar{1}$·8502626
20	$\bar{1}$·9917380	48	$\bar{1}$·9897740	76	$\bar{1}$·9695818	104	$\bar{1}$·8465062
20½	$\bar{1}$·9917174	48½	$\bar{1}$·9896960	76½	$\bar{1}$·9686229	104½	$\bar{1}$·8426810
21	$\bar{1}$·9916974	49	$\bar{1}$·9896156	77	$\bar{1}$·9676308	105	$\bar{1}$·8387862
21½	$\bar{1}$·9916777	49½	$\bar{1}$·9895326	77½	$\bar{1}$·9666044	105½	$\bar{1}$·8348212
22	$\bar{1}$·9916582	50	$\bar{1}$·9894470	78	$\bar{1}$·9655435	106	$\bar{1}$·8307854
22½	$\bar{1}$·9916391	50½	$\bar{1}$·9893586	78½	$\bar{1}$·9644470	106½	$\bar{1}$·8266778
23	$\bar{1}$·9916201	51	$\bar{1}$·9891534	79	$\bar{1}$·9633146	107	$\bar{1}$·8224984
23½	$\bar{1}$·9916013	51½	$\bar{1}$·9890435	79½	$\bar{1}$·9621456	107½	$\bar{1}$·8182459
24	$\bar{1}$·9915826	52	$\bar{1}$·9889325	80	$\bar{1}$·9609392	108	$\bar{1}$·8139201
24½	$\bar{1}$·9915639	52½	$\bar{1}$·9888196	80½	$\bar{1}$·9596948	108½	$\bar{1}$·8095202
25	$\bar{1}$·9915452	53	$\bar{1}$·9887042	81	$\bar{1}$·9584119	109	...
25½	$\bar{1}$·9915265	53½	$\bar{1}$·9885858	81½	$\bar{1}$·9570897		
26	$\bar{1}$·9915076	54	$\bar{1}$·9884637	82	$\bar{1}$·9557276		
26½	$\bar{1}$·9914886	54½	$\bar{1}$·9883371	82½	$\bar{1}$·9543250		
27	$\bar{1}$·9914693	55	$\bar{1}$·9882055	83	$\bar{1}$·9528813		
27½	$\bar{1}$·9914499	55½	$\bar{1}$·9880682	83½	$\bar{1}$·9513956		

HALF-YEARLY TABLE:—FEMALES. Interest 3 per Cent.

Logarithms of the Series $vp_x = \lambda\left(\frac{1}{1+\frac{i}{2}}\cdot\frac{l_{x+\frac{1}{2}}}{l_x}\right)$

Age (x)	$\lambda\ vp_x$	**Age** (x)	$\lambda\ vp_x$	**Age** (x)	$\lambda\ vp_x$	**Age** (x)	$\lambda\ vp_x$
0	$\bar{1}\cdot9511370$	28	$\bar{1}\cdot9913207$	56	$\bar{1}\cdot9887049$	84	$\bar{1}\cdot9534158$
0½	$\bar{1}\cdot9730914$	28½	$\bar{1}\cdot9912998$	56½	$\bar{1}\cdot9885495$	84½	$\bar{1}\cdot9519300$
1	$\bar{1}\cdot9767048$	29	$\bar{1}\cdot9912789$	57	$\bar{1}\cdot9883890$	85	$\bar{1}\cdot9504009$
1½	$\bar{1}\cdot9826042$	29½	$\bar{1}\cdot9912579$	57½	$\bar{1}\cdot9882229$	85½	$\bar{1}\cdot9488279$
2	$\bar{1}\cdot9856328$	30	$\bar{1}\cdot9912369$	58	$\bar{1}\cdot9880506$	86	$\bar{1}\cdot9472102$
2½	$\bar{1}\cdot9857906$	30½	$\bar{1}\cdot9912158$	58½	$\bar{1}\cdot9878711$	86½	$\bar{1}\cdot9455473$
3	$\bar{1}\cdot9877931$	31	$\bar{1}\cdot9911946$	59	$\bar{1}\cdot9876841$	87	$\bar{1}\cdot9438384$
3½	$\bar{1}\cdot9886459$	31½	$\bar{1}\cdot9911732$	59½	$\bar{1}\cdot9874886$	87½	$\bar{1}\cdot9420828$
4	$\bar{1}\cdot9893632$	32	$\bar{1}\cdot9911516$	60	$\bar{1}\cdot9872840$	88	$\bar{1}\cdot9402799$
4½	$\bar{1}\cdot9899571$	32½	$\bar{1}\cdot9911299$	60½	$\bar{1}\cdot9870699$	88½	$\bar{1}\cdot9384289$
5	$\bar{1}\cdot9904398$	33	$\bar{1}\cdot9911079$	61	$\bar{1}\cdot9868451$	89	$\bar{1}\cdot9365293$
5½	$\bar{1}\cdot9908232$	33½	$\bar{1}\cdot9910856$	61½	$\bar{1}\cdot9866094$	89½	$\bar{1}\cdot9345803$
6	$\bar{1}\cdot9911197$	34	$\bar{1}\cdot9910630$	62	$\bar{1}\cdot9863617$	90	$\bar{1}\cdot9325811$
6½	$\bar{1}\cdot9913411$	34½	$\bar{1}\cdot9910402$	62½	$\bar{1}\cdot9861017$	90½	$\bar{1}\cdot9305312$
7	$\bar{1}\cdot9914679$	35	$\bar{1}\cdot9910169$	63	$\bar{1}\cdot9858286$	91	$\bar{1}\cdot9284299$
7½	$\bar{1}\cdot9916393$	35½	$\bar{1}\cdot9909933$	63½	$\bar{1}\cdot9855414$	91½	$\bar{1}\cdot9262763$
8	$\bar{1}\cdot9917918$	36	$\bar{1}\cdot9909692$	64	$\bar{1}\cdot9852399$	92	$\bar{1}\cdot9240701$
8½	$\bar{1}\cdot9919258$	36½	$\bar{1}\cdot9909448$	64½	$\bar{1}\cdot9849230$	92½	$\bar{1}\cdot9218103$
9	$\bar{1}\cdot9920422$	37	$\bar{1}\cdot9909198$	65	$\bar{1}\cdot9845904$	93	$\bar{1}\cdot9194963$
9½	$\bar{1}\cdot9921410$	37½	$\bar{1}\cdot9908943$	65½	$\bar{1}\cdot9842412$	93½	$\bar{1}\cdot9171274$
10	$\bar{1}\cdot9922255$	38	$\bar{1}\cdot9908683$	66	$\bar{1}\cdot9838746$	94	$\bar{1}\cdot9147031$
10½	$\bar{1}\cdot9922939$	38½	$\bar{1}\cdot9908418$	66½	$\bar{1}\cdot9834901$	94½	$\bar{1}\cdot9122224$
11	$\bar{1}\cdot9923476$	39	$\bar{1}\cdot9908147$	67	$\bar{1}\cdot9830870$	95	$\bar{1}\cdot9096849$
11½	$\bar{1}\cdot9923878$	39½	$\bar{1}\cdot9907869$	67½	$\bar{1}\cdot9826647$	95½	$\bar{1}\cdot9070897$
12	$\bar{1}\cdot9924147$	40	$\bar{1}\cdot9907585$	68	$\bar{1}\cdot9822222$	96	$\bar{1}\cdot9044363$
12½	$\bar{1}\cdot9924297$	40½	$\bar{1}\cdot9907294$	68½	$\bar{1}\cdot9817591$	96½	$\bar{1}\cdot9017239$
13	$\bar{1}\cdot9924330$	41	$\bar{1}\cdot9906996$	69	$\bar{1}\cdot9812747$	97	$\bar{1}\cdot8989518$
13½	$\bar{1}\cdot9924256$	41½	$\bar{1}\cdot9906691$	69½	$\bar{1}\cdot9807682$	97½	$\bar{1}\cdot8961194$
14	$\bar{1}\cdot9924085$	42	$\bar{1}\cdot9906378$	70	$\bar{1}\cdot9802390$	98	$\bar{1}\cdot8932260$
14½	$\bar{1}\cdot9923819$	42½	$\bar{1}\cdot9906057$	70½	$\bar{1}\cdot9796863$	98½	$\bar{1}\cdot8902709$
15	$\bar{1}\cdot9923472$	43	$\bar{1}\cdot9905728$	71	$\bar{1}\cdot9791096$	99	$\bar{1}\cdot8872533$
15½	$\bar{1}\cdot9923047$	43½	$\bar{1}\cdot9905391$	71½	$\bar{1}\cdot9785081$	99½	$\bar{1}\cdot8841728$
16	$\bar{1}\cdot9922554$	44	$\bar{1}\cdot9905044$	72	$\bar{1}\cdot9778811$	100	$\bar{1}\cdot8810285$
16½	$\bar{1}\cdot9921998$	44½	$\bar{1}\cdot9904689$	72½	$\bar{1}\cdot9772279$	100½	$\bar{1}\cdot8778197$
17	$\bar{1}\cdot9921391$	45	$\bar{1}\cdot9904324$	73	$\bar{1}\cdot9765480$	101	$\bar{1}\cdot8745457$
17½	$\bar{1}\cdot9920737$	45½	$\bar{1}\cdot9903949$	73½	$\bar{1}\cdot9758405$	101½	$\bar{1}\cdot8712061$
18	$\bar{1}\cdot9920045$	46	$\bar{1}\cdot9903564$	74	$\bar{1}\cdot9751048$	102	$\bar{1}\cdot8677998$
18½	$\bar{1}\cdot9919322$	46½	$\bar{1}\cdot9903170$	74½	$\bar{1}\cdot9743402$	102½	$\bar{1}\cdot8643265$
19	$\bar{1}\cdot9918577$	47	$\bar{1}\cdot9902764$	75	$\bar{1}\cdot9735461$	103	$\bar{1}\cdot8607853$
19½	$\bar{1}\cdot9917815$	47½	$\bar{1}\cdot9902348$	75½	$\bar{1}\cdot9727216$	103½	$\bar{1}\cdot8571755$
20	$\bar{1}\cdot9916788$	48	$\bar{1}\cdot9901920$	76	$\bar{1}\cdot9718664$	104	$\bar{1}\cdot8534965$
20½	$\bar{1}\cdot9916538$	48½	$\bar{1}\cdot9901481$	76½	$\bar{1}\cdot9709794$	104½	$\bar{1}\cdot8497476$
21	$\bar{1}\cdot9916295$	49	$\bar{1}\cdot9901031$	77	$\bar{1}\cdot9700601$	105	$\bar{1}\cdot8459281$
21½	$\bar{1}\cdot9916056$	49½	$\bar{1}\cdot9900568$	77½	$\bar{1}\cdot9691079$	105½	$\bar{1}\cdot8420373$
22	$\bar{1}\cdot9915821$	50	$\bar{1}\cdot9900093$	78	$\bar{1}\cdot9681220$	106	$\bar{1}\cdot8380745$
22½	$\bar{1}\cdot9915588$	50½	$\bar{1}\cdot9899605$	78½	$\bar{1}\cdot9671018$	106½	$\bar{1}\cdot8340392$
23	$\bar{1}\cdot9915361$	51	$\bar{1}\cdot9899104$	79	$\bar{1}\cdot9660464$	107	$\bar{1}\cdot8299305$
23½	$\bar{1}\cdot9915136$	51½	$\bar{1}\cdot9898591$	79½	$\bar{1}\cdot9649554$	107½	$\bar{1}\cdot8257478$
24	$\bar{1}\cdot9914914$	52	$\bar{1}\cdot9898063$	80	$\bar{1}\cdot9638279$	108	$\bar{1}\cdot8214903$
24½	$\bar{1}\cdot9914695$	52½	$\bar{1}\cdot9897523$	80½	$\bar{1}\cdot9626635$	108½	$\bar{1}\cdot8171575$
25	$\bar{1}\cdot9914477$	53	$\bar{1}\cdot9896967$	81	$\bar{1}\cdot9614611$	109	...
25½	$\bar{1}\cdot9914263$	53½	$\bar{1}\cdot9896397$	81½	$\bar{1}\cdot9602204$		
26	$\bar{1}\cdot9914049$	54	$\bar{1}\cdot9892910$	82	$\bar{1}\cdot9589405$		
26½	$\bar{1}\cdot9913837$	54½	$\bar{1}\cdot9891485$	82½	$\bar{1}\cdot9576208$		
27	$\bar{1}\cdot9913626$	55	$\bar{1}\cdot9890038$	83	$\bar{1}\cdot9562606$		
27½	$\bar{1}\cdot9913416$	55½	$\bar{1}\cdot9888562$	83½	$\bar{1}\cdot9548591$		

HALF-YEARLY TABLE:—MALES.

Logarithms of the Series D_x; Rate of Interest 3 per Cent.

MALES.

Age (x) Half Years.	$\lambda\ D_x$	Age (x) Half Years.	$\lambda\ D_x$	Age (x) Half Years.	$\lambda\ D_x$	Age (x) Half Years.	$\lambda\ D_x$
0	5·7090538	55	5·1386267	110	4·6099998	165	3·3712943
1	5·6492465	56	5·1300765	111	4·5982052	166	3·3256193
2	5·6185381	57	5·1215065	112	4·5862734	167	3·2785005
3	5·5954977	58	5·1129162	113	4·5741979	168	3·2298960
4	5·5767437	59	5·1043053	114	4·5619719	169	3·1797635
5	5·5612816	60	5·0956734	115	4·5495877	170	3·1280597
6	5·5481169	61	5·0870197	116	4·5370370	171	3·0747410
7	5·5360183	62	5·0783139	117	4·5243109	172	3·0197629
8	5·5247018	63	5·0696452	118	4·5113999	173	2·9630803
9	5·5140513	64	5·0609229	119	4·4982937	174	2·9046476
10	5·5039610	65	5·0521764	120	4·4849816	175	2·8444185
11	5·4943346	66	5·0434047	121	4·4714520	176	2·7823458
12	5·4850863	67	5·0346072	122	4·4576928	177	2·7183820
13	5·4761398	68	5·0257828	123	4·4436912	178	2·6524788
14	5·4674293	69	5·0169307	124	4·4294338	179	2·5845874
15	5·4588719	70	5·0080499	125	4·4149066	180	2·5146580
16	5·4505016	71	4·9991392	126	4·4000947	181	2·4426405
17	5·4422978	72	4·9901976	127	4·3849828	182	2·3684840
18	5·4342407	73	4·9812239	128	4·3695550	183	2·2921370
19	5·4263115	74	4·9722169	129	4·3537945	184	2·2135474
20	5·4184920	75	4·9631754	130	4·3376841	185	2·1326623
21	5·4107650	76	4·9540980	131	4·3212058	186	2·0494284
22	5·4031141	77	4·9449834	132	4·3043410	187	1·9637915
23	5·3955235	78	4·9358302	133	4·2870706	188	1·8756969
24	5·3879786	79	4·9266368	134	4·2693745	189	1·7850891
25	5·3804654	80	4·9174019	135	4·2512323	190	1·6919123
26	5·3729706	81	4·9081237	136	4·2326229	191	1·5961097
27	5·3654821	82	4·8988007	137	4·2135243	192	1·4976239
28	5·3579883	83	4·8894312	138	4·1939142	193	1·3963971
29	5·3504785	84	4·8800134	139	4·1737693	194	1·2923706
30	5·3429430	85	4·8705456	140	4·1530661	195	1·1854851
31	5·3353726	86	4·8610260	141	4·1317800	196	1·0756808
32	5·3277593	87	4·8514526	142	4·1098860	197	0·9628971
33	5·3200956	88	4·8418236	143	4·0873584	198	0·8470728
34	5·3123750	89	4·8321369	144	4·0641710	199	0·7281462
35	5·3045917	90	4·8223904	145	4·0402966	200	0·6060546
36	5·2967410	91	4·8125822	146	4·0157077	201	0·4807350
37	5·2888188	92	4·8027100	147	3·9903761	202	0·3521236
38	5·2808217	93	4·7927716	148	3·9642727	203	0·2201560
39	5·2727475	94	4·7827648	149	3·9373680	204	0·0847671
40	5·2645944	95	4·7726873	150	3·9096319	205	9·9458913
41	5·2563323	96	4·7625367	151	3·8810334	206	9·8034621
42	5·2480497	97	4·7523107	152	3·8515411	207	9·6574125
43	5·2397471	98	4·7420067	153	3·8211228	208	9·5076750
44	5·2314247	99	4·7316223	154	3·7897457	209	9·3541812
45	5·2230829	100	4·7211548	155	3·7573764	210	9·1968622
46	5·2147219	101	4·7106017	156	3·7239808	211	9·0356483
47	5·2063420	102	4·6999604	157	3·6895242	212	8·8704695
48	5·1979433	103	4·6891137	158	3·6539712	213	8·7012548
49	5·1895258	104	4·6781572	159	3·6172858	214	8·5279326
50	5·1810897	105	4·6670896	160	3·5794313	215	8·3504309
51	5·1726349	106	4·6559091	161	3·5403704	216	8·1686768
52	5·1641613	107	4·6446134	162	3·5000652	217	7·9825969
53	5·1556689	108	4·6331991	163	3·4584771	218	7·7921170
54	5·1471574	109	4·6216628	164	3·4155667	219	7·5971624

HALF-YEARLY TABLE :—FEMALES.

Logarithms of the Series D_x; Rate of Interest 3 per Cent.

FEMALES.

Age (x) Half Years.	λ D_x	Age (x) Half Years.	λ D_x	Age (x) Half Years.	λ D_x	Age (x) Half Years.	λ D_x
0	5·6886465	55	5·1314854	110	4·6142017	165	3·4629029
1	5·6397835	56	5·1228270	111	4·6032054	166	3·4205237
2	5·6128748	57	5·1141476	112	4·5920615	167	3·3767842
3	5·5895796	58	5·1054474	113	4·5807664	168	3·3316433
4	5·5721837	59	5·0967262.	114	4·5693158	169	3·2850591
5	5·5578165	60	5·0879841	115	4·5577048	170	3·2369890
6	5·5436070	61	5·0792209	116	4·5459277	171	3·1873899
7	5·5314001	62	5·0704367	117	4·5339782	172	3·1362177
8	5·5200460	63	5·0616312	118	4·5218493	173	3·0834279
9	5·5094091	64	5·0528044	119	4·5095333	174	3·0289751
10	5·4993662	65	5·0439560	120	4·4970219	175	2·9728135
11	5·4898059	66	5·0350858	121	4·4843059	176	2·9148963
12	5·4806291	67	5·0261937	122	4·4713757	177	2·8551761
13	5·4717488	68	5·0172792	123	4·4582208	178	2·7936050
14	5·4630899	69	5·0083422	124	4·4448301	179	2·7301343
15	5·4545577	70	4·9993823	125	4·4311918	180	2·6647145
16	5·4461970	71	4·9903992	126	4·4172935	181	2·5972955
17	5·4379887	72	4·9813924	127	4·4031220	182	2·5278267
18	5·4299144	73	4·9723616	128	4·3886634	183	2·4562565
19	5·4219566	74	4·9633063	129	4·3739032	184	2·3825329
20	5·4140985	75	4·9542261	130	4·3588263	185	2·3066029
21	5·4063240	76	4·9451204	131	4·3434166	186	2·2284131
22	5·3986178	77	4·9359887	132	4·3276577	187	2·1479094
23	5·3909654	78	4·9268304	133	4·3115322	188	2·0650368
24	5·3833531	79	4·9176450	134	4·2950223	189	1·9797393
25	5·3757678	80	4·9084319	135	4·2781093	190	1·8919622
26	5·3681974	81	4·8991903	136	4·2607739	191	1·8016470
27	5·3606303	82	4·8899197	137	4·2429961	192	1·7087367
28	5·3530560	83	4·8806193	138	4·2247552	193	1·6131729
29	5·3454643	84	4·8712883	139	4·2060299	194	1·5148968
30	5·3378463	85	4·8619261	140	4·1867980	195	1·4133485
31	5·3301934	86	4·8525318	141	4·1670369	196	1·3099679
32	5·3224981	87	4·8431046	142	4·1467232	197	1·2031939
33	5·3147534	88	4·8336436	143	4·1258328	198	1·0934647
34	5·3069532	89	4·8241480	144	4·1043408	199	0·9807180
35	5·2990923	90	4·8146168	145	4·0822218	200	0·8648908
36	5·2911659	91	4·8050491	146	4·0594497	201	0·7459192
37	5·2831703	92	4·7954440	147	4·0359977	202	0·6237388
38	5·2751025	93	4·7858004	148	4·0118381	203	0·4982845
39	5·2669601	94	4·7761173	149	3·9869429	204	0·3694906
40	5·2587416	95	4·7663937	150	3·9612830	205	0·2372904
41	5·2504203	96	4·7566284	151	3·9348291	206	0·1016168
42	5·2420742	97	4·7468204	152	3·9075507	207	9·9624021
43	5·2337036	98	4·7369685	153	3·8794170	208	9·8195775
44	5·2253092	99	4·7270715	154	3·8503964	209	9·6730740
45	5·2168912	100	4·7171283	155	3·8204565	210	9·5228215
46	5·2084500	101	4·7071375	156	3·7895644	211	9·3687495
47	5·1999860	102	4·6970980	157	3·7576863	212	9·2107868
48	5·1914996	103	4·6870084	158	3·7247880	213	9·0488613
49	5·1829909	104	4·6768674	159	3·6908344	214	8·8829005
50	5·1744604	105	4·6666737	160	3·6557897	215	8·7128309
51	5·1659081	106	4·6564259	161	3·6196176	216	8·5385786
52	5·1573343	107	4·6461226	162	3·5822810	217	8·3600689
53	5·1487391	108	4·6357623	163	3·5437421	218	8·1772264
54	5·1401228	109	4·6250532	164	3·5039625	219	7·9899751

HALF-YEARLY TABLE:—MALES. Interest 3 per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	511,745	19,235,375	7·2841007	28	134,920	5,434,336	6·7351465
0½	445,909	18,723,630	7·2723900	28½	132,284	5,299,416	6·7242280
1	415,469	18,277,721	7·2619221	29	129,693	5,167,132	6·7132496
1½	394,001	17,862,252	7·2519363	29½	127,147	5,037,439	6·7022098
2	377,349	17,468,251	7·2422495	30	124,645	4,910,292	6·6911073
2½	364,151	17,090,902	7·2327651	30½	122,185	4,785,647	6·6799406
3	353,278	16,726,751	7·2234116	31	119,769	4,663,462	6·6687085
3½	343,572	16,373,473	7·2141408	31½	117,394	4,543,693	6·6574090
4	334,736	16,029,901	7·2049308	32	115,060	4,426,299	6·6460407
4½	326,626	15,695,165	7·1957659	32½	112,766	4,311,239	6·6346021
5	319,125	15,368,539	7·1866326	33	110,511	4,198,473	6·6230914
5½	312,129	15,049,414	7·1775196	33½	108,295	4,087,962	6·6115069
6	305,553	14,737,285	7·1684175	34	106,116	3,979,667	6·5998467
6½	299,323	14,431,732	7·1593185	34½	103,975	3,873,551	6·5881093
7	293,379	14,132,409	7·1502162	35	101,871	3,769,576	6·5762925
7½	287,655	13,839,030	7·1411056	35½	99,802	3,667,705	6·5643944
8	282,164	13,551,375	7·1319833	36	97,768	3,567,903	6·5524131
8½	276,884	13,269,211	7·1228451	36½	95,769	3,470,135	6·5403464
9	271,795	12,992,327	7·1136869	37	93,803	3,374,366	6·5281922
9½	266,877	12,720,532	7·1045053	37½	91,870	3,280,563	6·5159484
10	262,115	12,453,655	7·0952968	38	89,970	3,188,693	6·5036127
10½	257,493	12,191,540	7·0860586	38½	88,102	3,098,723	6·4911827
11	252,996	11,934,047	7·0767877	39	86,264	3,010,621	6·4786561
11½	248,613	11,681,051	7·0674819	39½	84,457	2,924,357	6·4660304
12	244,331	11,432,438	7·0581388	40	82,680	2,839,900	6·4533030
12½	240,140	11,188,107	7·0487567	40½	80,933	2,757,220	6·4404714
13	236,032	10,947,967	7·0393335	41	79,214	2,676,287	6·4275327
13½	231,997	10,711,935	7·0298680	41½	77,523	2,597,073	6·4144842
14	228,028	10,479,938	7·0203588	42	75,860	2,519,550	6·4013230
14½	224,119	10,251,910	7·0108049	42½	74,224	2,443,690	6·3880461
15	220,264	10,027,791	7·0012052	43	72,615	2,369,466	6·3746505
15½	216,457	9,807,527	6·9915595	43½	71,032	2,296,851	6·3611329
16	212,696	9,591,070	6·9818671	44	69,474	2,225,819	6·3474899
16½	208,976	9,378,374	6·9721276	44½	67,942	2,156,345	6·3337182
17	205,293	9,169,398	6·9623408	45	66,434	2,088,403	6·3198143
17½	201,647	8,964,105	6·9525069	45½	64,950	2,021,969	6·3057745
18	198,035	8,762,458	6·9426260	46	63,491	1,957,019	6·2915950
18½	194,455	8,564,423	6·9326981	46½	62,054	1,893,528	6·2772717
19	190,907	8,369,968	6·9227238	47	60,641	1,831,474	6·2628008
19½	187,390	8,179,061	6·9127035	47½	59,250	1,770,833	6·2481776
20	183,905	7,991,671	6·9026377	48	57,881	1,711,583	6·2333980
20½	180,440	7,807,766	6·8925268	48½	56,534	1,653,702	6·2184572
21	177,031	7,627,326	6·8823722	49	55,209	1,597,168	6·2033506
21½	173,679	7,450,295	6·8721735	49½	53,904	1,541,959	6·1880728
22	170,382	7,276,616	6·8619295	50	52,620	1,488,055	6·1726190
22½	167,141	7,106,234	6·8516394	50½	51,357	1,435,435	6·1569835
23	163,954	6,939,093	6·8413027	51	50,114	1,384,078	6·1411606
23½	160,821	6,775,139	6·8309182	51½	48,878	1,333,964	6·1251441
24	157,741	6,614,318	6·8204851	52	47,660	1,285,086	6·1089321
24½	154,713	6,456,577	6·8100024	52½	46,461	1,237,426	6·0925192
25	151,736	6,301,864	6·7994690	53	45,280	1,190,965	6·0758990
25½	148,811	6,150,128	6·7888842	53½	44,118	1,145,685	6·0590652
26	145,936	6,001,317	6·7782465	54	42,973	1,101,567	6·0420110
26½	143,110	5,855,381	6·7675552	54½	41,847	1,058,594	6·0247295
27	140,332	5,712,271	6·7568088	55	40,738	1,016,747	6·0072129
27½	137,603	5,571,939	6·7460063	55½	39,647	976,009	5·9894539

HALF-YEARLY TABLE:—MALES. Interest 3 per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
56	38,572	936,362	5·9714438	84	1,697·8	13,071·9	4·1163387
56½	37,514	897,790	5·9531748	84½	1,512·7	11,374·1	4·0559170
57	36,473	860,276	5·9346378	85	1,342·9	9,861·4	3·9939386
57½	35,448	823,803	5·9158234	85½	1,187·8	8,518·5	3·9303631
58	34,438	788,355	5·8967219	86	1,046·6	7,330·7	3·8651454
58½	33,443	753,917	5·8773236	86½	918·50	6,284·14	3·7982459
59	32,464	720,474	5·8576183	87	802·87	5,365·64	3·7296215
59½	31,499	688,010	5·8375948	87½	698·91	4,562·77	3·6592286
60	30,548	656,511	5·8172420	88	605·82	3,863·86	3·5870214
60½	29,611	625,963	5·7965487	88½	522·86	3,258·04	3·5129564
61	28,688	596,352	5·7755027	89	449·24	2,735·18	3·4369859
61½	27,777	567,664	5·7540913	89½	384·23	2,285·94	3·3590648
62	26,880	539,887	5·7323029	90	327·08	1,901·71	3·2791443
62½	25,996	513,007	5·7101233	90½	277·10	1,574·63	3·1971785
63	25,124	487,011	5·6875388	91	233·61	1,297·53	3·1131174
63½	24,265	461,887	5·6645358	91½	195·95	1,063·92	3·0269090
64	23,418	437,622	5·6410992	92	163·51	867·97	2·9385047
64½	22,584	414,204	5·6172143	92½	135·73	704·46	2·8478563
65	21,761	391,620	5·5928649	93	112·05	568·73	2·7549061
65½	20,951	369,859	5·5680362	93½	92·001	456·675	2·6596073
66	20,153	348,908	5·5427109	94	75·110	364·674	2·5619048
66½	19,367	328,755	5·5168724	94½	60·966	289·564	2·4617446
67	18,594	309,388	5·4905035	95	49·194	228·598	2·3590724
67½	17,833	290,794	5·4635855	95½	39·456	179·404	2·2538321
68	17,085	272,961	5·4361006	96	31·450	139·948	2·1459668
68½	16,350	255,876	5·4080295	96½	24·911	108·498	2·0354218
69	15,628	239,526	5·3793527	97	19·605	83·587	1·9221387
69½	14,920	223,898	5·3500502	97½	15·328	63·982	1·8060578
70	14,225	208,978	5·3201005	98	11·904	48·654	1·6871186
70½	13.545	194,753	5·2894842	98½	9·1812	36·7502	1·5652597
71	12,879	181,208	5·2581774	99	7·0319	27·5690	1·4404210
71½	12,228	168,329	5·2261589	99½	5·3474	20·5371	1·3125391
72	11,592	156,101	5·1934057	100	4·0370	15·1897	1·1815492
72½	10,972	144,509	5·1598949	100½	3·0251	11·1527	1·0473800
73	10.368	133,537	5·1256016	101	2·2497	8·1276	0·9099623
73½	9,780·8	123,169·3	5·0905026	101½	1·6602	5·8779	0·7692222
74	9.210·3	113,388·5	5·0545690	102	1·2155	4·2177	0·6250757
74½	8,657·0	104,178·2	5·0177769	102½	·8829	3·0022	0·4774396
75	8,121·4	95,521·2	4·9800998	103	·6360	2·1193	0·3261924
75½	7,603·8	87,399·8	4·9415104	103½	·4544	1·4833	0·1712290
76	7,104·6	79,796·0	4·9019811	104	·3219	1·0289	0·0123732
76½	6,624·0	72,691·4	4·8614830	104½	·2260	·7070	$\bar{1}$·8494194
77	6,162·3	66,067·4	4·8199872	105	·1573	·4810	$\bar{1}$·6821451
77½	5,719·7	59,905·1	4·7774638	105½	·1086	·3237	$\bar{1}$·5101427
78	5,296·4	54.185·4	4·7338823	106	·0742	·2151	$\bar{1}$·3326404
78½	4,892·4	48,889·0	4·6892112	106½	·0503	·1409	$\bar{1}$·1489110
79	4,507·9	43,996·6	4·6434191	107	·0337	·0906	$\bar{2}$·9571282
79½	4,142·7	39,488·7	4·5964728	107½	·0224	·0569	$\bar{2}$·7551123
80	3,796·9	35,346·0	4·5483403	108	·0147	·0345	$\bar{2}$·5378191
80½	3,470·3	31,549·1	4·4989870	108½	·0096	·0198	$\bar{2}$·2966652
81	3.162·8	28,078·8	4·4483785	109	·0062	·0102	$\bar{2}$·0086002
81½	2,873·9	24,916·0	4·3964783	109½	·0040	·0040	$\bar{3}$·6020600
82	2,603·6	22,042·1	4·3432530				
82½	2,351·2	19,438·5	4·2886628				
83	2,116·5	17,087·3	4·2326734				
83½	1,898·9	14,970·8	4·1752450				

HALF-YEARLY TABLE:—MALES. Interest 3 per Cent.

VALUES OF ANNUITIES.* SINGLE and HALF-YEARLY PREMIUMS which insure **£1** on the LIFE of a MALE.

Age x	Present Value of an **Annuity** of £1 payable every **Half Year.** $\frac{N_x}{D_x} = A_x$	**Annuity** payable every **Half Year** which £1 will purchase. $\frac{D_x}{N_x} = a_x$	**Single Premium** which will insure £1 over the **Whole Term of Life.** $1-d\ A_x = \Pi_x$	**Half-yearly Premium** which will insure £1 over the **Whole Term of Life.** $a_x - d = \pi_x$	$\lambda\left(\frac{N_x}{D_x}\right) = \lambda A_x$	$\lambda\,\Pi_x$	$\lambda\,\pi_x$	**Age** x
	£	£	£	£				
0	37·5878	·026604	·44452	·011826	1·5750469	$\bar{1}$·6478913	$\bar{2}$·0728379	0
0½	41·9898	·023815	·37946	·009037	1·6231435	$\bar{1}$·5791660	$\bar{3}$·9560243	0½
1	43·9930	·022731	·34986	·007953	1·6433840	$\bar{1}$·5438943	$\bar{3}$·9005310	1
1½	45·3355	·022058	·33002	·007280	1·6564386	$\bar{1}$·5185403	$\bar{3}$·8621314	1½
2	46·2920	·021602	·31588	·006824	1·6655058	$\bar{1}$·4995221	$\bar{3}$·8340390	2
2½	46·9336	·021307	·30640	·006529	1·6714835	$\bar{1}$·4862888	$\bar{3}$·8148467	2½
3	47·3472	·021121	·30029	·006343	1·6752947	$\bar{1}$·4775409	$\bar{3}$·8022947	3
3½	47·6565	·020983	·29572	·006205	1·6781225	$\bar{1}$·4708807	$\bar{3}$·7927418	3½
4	47·8883	·020882	·29229	·006104	1·6802290	$\bar{1}$·4658140	$\bar{3}$·7856145	4
4½	48·0523	·020811	·28987	·006033	1·6817146	$\bar{1}$·4622033	$\bar{3}$·7805333	4½
5	48·1584	·020765	·28830	·005987	1·6826716	$\bar{1}$·4598446	$\bar{3}$·7772093	5
5½	48·2153	·020740	·28746	·005962	1·6831850	$\bar{1}$·4585774	$\bar{3}$·7753920	5½
6	48·2315	·020733	·28722	·005955	1·6833312	$\bar{1}$·4582147	$\bar{3}$·7748818	6
6½	48·2146	·020741	·28747	·005963	1·6831787	$\bar{1}$·4585925	$\bar{3}$·7754648	6½
7	48·1711	·020759	·28811	·005981	1·6827869	$\bar{1}$·4595583	$\bar{3}$·7767738	7
7½	48·1098	·020786	·28902	·006008	1·6822337	$\bar{1}$·4609279	$\bar{3}$·7787299	7½
8	48·0266	·020822	·29025	·006044	1·6814817	$\bar{1}$·4627722	$\bar{3}$·7813245	8
8½	47·9234	·020867	·29177	·006089	1·6805473	$\bar{1}$·4650406	$\bar{3}$·7845460	8½
9	47·8020	·020920	·29357	·006142	1·6794462	$\bar{1}$·4677117	$\bar{3}$·7883098	9
9½	47·6644	·020980	·29560	·006202	1·6781938	$\bar{1}$·4707044	$\bar{3}$·7925318	9½
10	47·5122	·021047	·29785	·006269	1·6768048	$\bar{1}$·4739976	$\bar{3}$·7971983	10
10½	47·3471	·021121	·30029	·006343	1·6752936	$\bar{1}$·4775409	$\bar{3}$·8022947	10½
11	47·1708	·021200	·30289	·006422	1·6736736	$\bar{1}$·4812849	$\bar{3}$·8076703	11
11½	46·9849	·021283	·30564	·006505	1·6719584	$\bar{1}$·4852102	$\bar{3}$·8132473	11½
12	46·7908	·021372	·30851	·006594	1·6701602	$\bar{1}$·4892692	$\bar{3}$·8191489	12
12½	46·5899	·021464	·31148	·006686	1·6682913	$\bar{1}$·4934302	$\bar{3}$·8251664	12½
13	46·3834	·021559	·31453	·006781	1·6663629	$\bar{1}$·4976621	$\bar{3}$·8312937	13
13½	46·1728	·021658	·31764	·006880	1·6643859	$\bar{1}$·5019352	$\bar{3}$·8375884	13½
14	45·9590	·021759	·32080	·006981	1·6623705	$\bar{1}$·5062344	$\bar{3}$·8439176	14
14½	45·7432	·021861	·32399	·007083	1·6603264	$\bar{1}$·5105316	$\bar{3}$·8502172	14½
15	45·5263	·021965	·32720	·007187	1·6582622	$\bar{1}$·5148133	$\bar{3}$·8565476	15
15½	45·3093	·022071	·33040	·007293	1·6561869	$\bar{1}$·5190400	$\bar{3}$·8629062	15½
16	45·0929	·022176	·33360	·007398	1·6541078	$\bar{1}$·5232260	$\bar{3}$·8691143	16
16½	44·8778	·022283	·33678	·007505	1·6520320	$\bar{1}$·5273463	$\bar{3}$·8753507	16½
17	44·6648	·022389	·33993	·007611	1·6499658	$\bar{1}$·5313895	$\bar{3}$·8814417	17
17½	44·4545	·022495	·34304	·007717	1·6479152	$\bar{1}$·5353448	$\bar{3}$·8874485	17½
18	44·2471	·022600	·34610	·007822	1·6458850	$\bar{1}$·5392016	$\bar{3}$·8933178	18
18½	44·0432	·022705	·34911	·007927	1·6438793	$\bar{1}$·5429623	$\bar{3}$·8991089	18½
19	43·8432	·022809	·35207	·008031	1·6419021	$\bar{1}$·5466290	$\bar{3}$·9047696	19
19½	43·6472	·022911	·35497	·008133	1·6399560	$\bar{1}$·5501917	$\bar{3}$·9102508	19½
20	43·4554	·023012	·35780	·008234	1·6380433	$\bar{1}$·5536403	$\bar{3}$·9156109	20
20½	43·2708	·023110	·36053	·008332	1·6361945	$\bar{1}$·5569414	$\bar{3}$·9207493	20½
21	43·0846	·023210	·36328	·008432	1·6343225	$\bar{1}$·5602415	$\bar{3}$·9259306	21
21½	42·8970	·023312	·36605	·008534	1·6324264	$\bar{1}$·5635404	$\bar{3}$·9311526	21½
22	42·7076	·023415	·36885	·008637	1·6305048	$\bar{1}$·5668498	$\bar{3}$·9363629	22
22½	42·5164	·023520	·37168	·008742	1·6285565	$\bar{1}$·5701692	$\bar{3}$·9416108	22½
23	42·3234	·023628	·37453	·008850	1·6265808	$\bar{1}$·5734866	$\bar{3}$·9469433	23
23½	42·1285	·023737	·37741	·008959	1·6245762	$\bar{1}$·5768134	$\bar{3}$·9522595	23½
24	41·9316	·023848	·38032	·009070	1·6225418	$\bar{1}$·5801492	$\bar{3}$·9576073	24
24½	41·7327	·023962	·38326	·009184	1·6204766	$\bar{1}$·5834935	$\bar{3}$·9630319	24½
25	41·5317	·024078	·38623	·009300	1·6183793	$\bar{1}$·5868460	$\bar{3}$·9684829	25
25½	41·3285	·024196	·38923	·009418	1·6162493	$\bar{1}$·5902063	$\bar{3}$·9739587	25½
26	41·1230	·024317	·39227	·009539	1·6140852	$\bar{1}$·5935851	$\bar{3}$·9795028	26
26½	40·9153	·024441	·39534	·009663	1·6118863	$\bar{1}$·5969708	$\bar{3}$·9851120	26½
27	40·7053	·024567	·39844	·009789	1·6096514	$\bar{1}$·6003629	$\bar{3}$·9907383	27
27½	40·4930	·024696	·40158	·009918	1·6073796	$\bar{1}$·6037721	$\bar{3}$·9964241	27½

* **Note.**—The Value of an Annuity of £·5 payable at the commencement of every **half year** that the Annuitant lives, making £1 a year, is obtained by dividing the number in column 2. by *two*. The **Sum Insured** is payable at the end of the **half year** of age in which the death occurs.

HALF-YEARLY TABLE:—MALES. Interest 3 per Cent.

VALUES OF ANNUITIES. SINGLE and HALF-YEARLY PREMIUMS which insure £1 on the LIFE of a MALE.

Age	**Present Value** of an **Annuity** of £1 payable every **Half Year.**	**Annuity** payable every **Half Year** which £1 will purchase.	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Half-yearly Premium** which will insure £1 over the **Whole Term of Life.**	$\lambda\left(\frac{N_x}{D_x}\right)$ $=\lambda A_x$	$\lambda\ \Pi_x$	$\lambda\ \pi_x$	Age
x	$\frac{N_x}{D_x}=A_x$	$\frac{D_x}{N_x}=a_x$	$1-d\ A_x=\Pi_x$	$a_x-d=\pi_x$				x
	£	£	£	£				
28	40·2782	·024827	·40476	·010049	1·6050700	$\bar{1}$·6071976	$\bar{2}$·0021228	28
28½	40·0610	·024962	·40797	·010184	1·6027215	$\bar{1}$·6106282	$\bar{2}$·0079184	28½
29	39·8413	·025100	·41121	·010322	1·6003334	$\bar{1}$·6140637	$\bar{2}$·0137639	29
29½	39·6191	·025240	·41450	·010462	1·5979045	$\bar{1}$·6175245	$\bar{2}$·0196147	29½
30	39·3943	·025384	·41782	·010606	1·5954339	$\bar{1}$·6209892	$\bar{2}$·0255516	30
30½	39·1671	·025532	·42118	·010754	1·5929209	$\bar{1}$·6244677	$\bar{2}$·0315700	30½
31	38·9372	·025682	·42457	·010904	1·5903646	$\bar{1}$·6279493	$\bar{2}$·0375858	31
31½	38·7047	·025837	·42801	·011059	1·5877638	$\bar{1}$·6314539	$\bar{2}$·0437159	31½
32	38·4696	·025995	·43148	·011217	1·5851178	$\bar{1}$·6349607	$\bar{2}$·0498767	32
32½	38·2319	·026156	·43500	·011373	1·5824257	$\bar{1}$·6384893	$\bar{2}$·0560659	32½
33	37·9915	·026322	·43855	·011544	1·5796867	$\bar{1}$·6420191	$\bar{2}$·0623563	33
33½	37·7485	·026491	·44214	·011713	1·5768997	$\bar{1}$·6455598	$\bar{2}$·0686681	33½
34	37·5028	·026665	·44577	·011887	1·5740639	$\bar{1}$·6491108	$\bar{2}$·0750723	34
34½	37·2545	·026842	·44944	·012064	1·5711786	$\bar{1}$·6526717	$\bar{2}$·0814913	34½
35	37·0035	·027024	·45315	·012246	1·5682426	$\bar{1}$·6562420	$\bar{2}$·0879943	35
35½	36·7498	·027211	·45690	·012433	1·5652552	$\bar{1}$·6598212	$\bar{2}$·0945759	35½
36	36·4935	·027402	·46069	·012624	1·5622155	$\bar{1}$·6634088	$\bar{2}$·1011970	36
36½	36·2345	·027598	·46451	·012820	1·5591225	$\bar{1}$·6669951	$\bar{2}$·1078880	36½
37	35·9729	·027799	·46838	·013021	1·5559753	$\bar{1}$·6705983	$\bar{2}$·1146443	37
37½	35·7086	·028004	·47229	·013226	1·5527730	$\bar{1}$·6742088	$\bar{2}$·1214285	37½
38	35·4417	·028215	·47623	·013437	1·5495147	$\bar{1}$·6778168	$\bar{2}$·1283023	38
38½	35·1722	·028432	·48021	·013654	1·5461993	$\bar{1}$·6814312	$\bar{2}$·1352599	38½
39	34·9000	·028653	·48424	·013875	1·5428259	$\bar{1}$·6850607	$\bar{2}$·1422330	39
39½	34·6253	·028881	·48830	·014103	1·5393936	$\bar{1}$·6886867	$\bar{2}$·1493115	39½
40	34·3480	·029114	·49239	·014336	1·5359011	$\bar{1}$·6923092	$\bar{2}$·1564280	40
40½	34·0681	·029353	·49653	·014575	1·5323477	$\bar{1}$·6959455	$\bar{2}$·1636086	40½
41	33·7856	·029598	·50070	·014820	1·5287320	$\bar{1}$·6995776	$\bar{2}$·1708482	41
41½	33·5006	·029850	·50492	·015072	1·5250530	$\bar{1}$·7032226	$\bar{2}$·1781709	41½
42	33·2131	·030109	·50917	·015331	1·5213096	$\bar{1}$·7068628	$\bar{2}$·1855705	42
42½	32·9231	·030374	·51345	·015596	1·5175005	$\bar{1}$·7104982	$\bar{2}$·1930132	42½
43	32·6306	·030646	·51777	·015868	1·5136245	$\bar{1}$·7141369	$\bar{2}$·2005222	43
43½	32·3356	·030926	·52213	·016148	1·5096803	$\bar{1}$·7177786	$\bar{2}$·2081187	43½
44	32·0381	·031213	·52653	·016435	1·5056663	$\bar{1}$·7214231	$\bar{2}$·2157697	44
44½	31·7381	·031508	·53096	·016730	1·5015813	$\bar{1}$·7250618	$\bar{2}$·2234959	44½
45	31·4358	·031811	·53543	·017033	1·4974239	$\bar{1}$·7287027	$\bar{2}$·2312911	45
45½	31·1309	·032122	·53994	·017344	1·4931923	$\bar{1}$·7323455	$\bar{2}$·2391493	45½
46	30·8237	·032443	·54448	·017665	1·4888850	$\bar{1}$·7359819	$\bar{2}$·2471136	46
46½	30·5141	·032772	·54905	·017994	1·4845001	$\bar{1}$·7396119	$\bar{2}$·2551277	46½
47	30·2020	·033110	·55366	·018332	1·4800360	$\bar{1}$·7432431	$\bar{2}$·2632098	47
47½	29·8875	·033459	·55831	·018681	1·4754903	$\bar{1}$·7468754	$\bar{2}$·2714001	47½
48	29·5707	·033817	·56299	·019039	1·4708613	$\bar{1}$·7505007	$\bar{2}$·2796441	48
48½	29·2514	·034186	·56771	·019408	1·4661465	$\bar{1}$·7541265	$\bar{2}$·2879808	48½
49	28·9297	·034567	·57247	·019789	1·4613439	$\bar{1}$·7577527	$\bar{2}$·2964238	49
49½	28·6056	·034958	·57726	·020180	1·4564505	$\bar{1}$·7613715	$\bar{2}$·3049212	49½
50	28·2790	·035362	·58208	·020584	1·4514642	$\bar{1}$·7649827	$\bar{2}$·3135298	50
50½	27·9500	·035778	·58694	·021000	1·4463818	$\bar{1}$·7685937	$\bar{2}$·3222193	50½
51	27·6185	·036208	·59184	·021430	1·4412002	$\bar{1}$·7722043	$\bar{2}$·3310222	51
51½	27·2917	·036641	·59667	·021863	1·4360304	$\bar{1}$·7757342	$\bar{2}$·3397098	51½
52	26·9634	·037087	·60153	·022309	1·4307749	$\bar{1}$·7792573	$\bar{2}$·3484801	52
52½	26·6336	·037547	·60640	·022769	1·4254296	$\bar{1}$·7827592	$\bar{2}$·3573440	52½
53	26·3021	·038020	·61130	·023242	1·4199899	$\bar{1}$·7862544	$\bar{2}$·3662735	53
53½	25·9688	·038508	·61622	·023730	1·4144518	$\bar{1}$·7897358	$\bar{2}$·3752977	53½
54	25·6337	·039011	·62118	·024233	1·4088119	$\bar{1}$·7932175	$\bar{2}$·3844072	54
54½	25·2969	·039531	·62615	·024753	1·4030667	$\bar{1}$·7966784	$\bar{2}$·3936278	54½
55	24·9582	·040067	·63116	·025289	1·3972131	$\bar{1}$·8001395	$\bar{2}$·4029317	55
55½	24·6178	·040621	·63619	·025843	1·3912487	$\bar{1}$·8035868	$\bar{2}$·4123429	55½

HALF-YEARLY TABLE:—MALES. Interest 3 per Cent.

VALUES OF ANNUITIES. SINGLE and HALF-YEARLY PREMIUMS which insure £1 on the LIFE of a MALE.

Age	Present Value of an **Annuity** of £1 payable every **Half Year.**	**Annuity** payable every **Half Year** which £1 will purchase.	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Half-yearly Premium** which will insure £1 over the **Whole Term of Life.**	$\lambda\left(\frac{N_x}{D_x}\right)$ $=\lambda A_x$	$\lambda\,\Pi_x$	$\lambda\,\pi_x$	Age
x	$\frac{N_x}{D_x}=A_x$	$\frac{D_x}{N_x}=a_x$	$1-d\,A_x=\Pi_x$	$a_x-d=\pi_x$				x
	£	£	£	£				
56	24·2756	·041194	·64125	·026416	1·3851704	$\bar{1}$·8070274	$\bar{2}$·4218671	56
56½	23·9319	·041785	·64633	·027007	1·3789769	$\bar{1}$·8104543	$\bar{2}$·4314763	56½
57	23·5866	·042397	·65143	·027619	1·3726659	$\bar{1}$·8138678	$\bar{2}$·4412080	57
57½	23·2400	·043029	·65655	·028251	1·3662357	$\bar{1}$·8172678	$\bar{2}$·4510338	57½
58	22·8921	·043683	·66169	·028905	1·3596849	$\bar{1}$·8206546	$\bar{2}$·4609730	58
58½	22·5431	·044360	·66685	·029582	1·3530127	$\bar{1}$·8240282	$\bar{2}$·4710275	58½
59	22·1931	·045059	·67202	·030281	1·3462184	$\bar{1}$·8273822	$\bar{2}$·4811702	59
59½	21·8424	·045782	·67721	·031004	1·3393011	$\bar{1}$·8307234	$\bar{2}$·4914177	59½
60	21·4912	·046531	·68240	·031753	1·3322604	$\bar{1}$·8340390	$\bar{2}$·5017848	60
60½	21·1396	·047305	·68759	·032527	1·3250967	$\bar{1}$·8373296	$\bar{2}$·5122440	60½
61	20·7879	·048105	·69279	·033327	1·3178099	$\bar{1}$·8406016	$\bar{2}$·5227962	61
61½	20·4362	·048933	·69799	·034155	1·3104001	$\bar{1}$·8438492	$\bar{2}$·5334543	61½
62	20·0849	·049789	·70318	·035011	1·3028691	$\bar{1}$·8470665	$\bar{2}$·5442045	62
62½	19·7341	·050674	·70836	·035896	1·2952167	$\bar{1}$·8502540	$\bar{2}$·5550461	62½
63	19·3840	·051589	·71354	·036811	1·2874441	$\bar{1}$·8534183	$\bar{2}$·5659776	63
63½	19·0350	·052535	·71869	·037757	1·2795530	$\bar{1}$·8565416	$\bar{2}$·5769975	63½
64	18·6872	·053513	·72383	·038735	1·2715442	$\bar{1}$·8596366	$\bar{2}$·5881036	64
64½	18·3409	·054523	·72895	·039745	1·2634198	$\bar{1}$·8626977	$\bar{2}$·5992825	64½
65	17·9962	·055567	·73405	·040789	1·2551808	$\bar{1}$·8657256	$\bar{2}$·6105431	65
65½	17·6535	·056646	·73911	·041868	1·2468304	$\bar{1}$·8687091	$\bar{2}$·6218822	65½
66	17·3129	·057760	·74414	·042982	1·2383699	$\bar{1}$·8716546	$\bar{2}$·6332866	66
66½	16·9747	·058911	·74914	·044133	1·2298018	$\bar{1}$·8745630	$\bar{2}$·6447635	66½
67	16·6391	·060100	·75410	·045322	1·2211290	$\bar{1}$·8774289	$\bar{2}$·6563091	67
67½	16·3062	·061326	·75902	·046548	1·2123532	$\bar{1}$·8802532	$\bar{2}$·6679010	67½
68	15·9764	·062593	·76390	·047815	1·2034777	$\bar{1}$·8830365	$\bar{2}$·6795642	68
68½	15·6497	·063899	·76872	·049121	1·1945052	$\bar{1}$·8857682	$\bar{2}$·6912672	68½
69	15·3263	·065247	·77350	·050469	1·1854385	$\bar{1}$·8884603	$\bar{2}$·7030247	69
69½	15·0066	·066638	·77823	·051860	1·1762809	$\bar{1}$·8911080	$\bar{2}$·7148325	69½
70	14·6904	·068072	·78290	·053294	1·1670344	$\bar{1}$·8937063	$\bar{2}$·7266783	70
70½	14·3782	·069550	·78751	·054772	1·1577042	$\bar{1}$·8962561	$\bar{2}$·7385586	70½
71	14·0699	·071074	·79207	·056296	1·1482914	$\bar{1}$·8987636	$\bar{2}$·7504775	71
71½	13·7658	·072644	·79656	·057866	1·1388005	$\bar{1}$·9012185	$\bar{2}$·7624235	71½
72	13·4659	·074262	·80100	·059484	1·1292347	$\bar{1}$·9036325	$\bar{2}$·7744002	72
72½	13·1704	·075928	·80536	·061150	1·1195983	$\bar{1}$·9059901	$\bar{2}$·7863965	72½
73	12·8794	·077644	·80966	·062866	1·1098939	$\bar{1}$·9083027	$\bar{2}$·7984158	73
73½	12·5929	·079410	·81390	·064632	1·1001265	$\bar{1}$·9105710	$\bar{2}$·8104476	73½
74	12·3111	·081228	·81806	·066450	1·0902963	$\bar{1}$·9127852	$\bar{2}$·8224950	74
74½	12·0340	·083098	·82216	·068320	1·0804089	$\bar{1}$·9149563	$\bar{2}$·8345479	74½
75	11·7616	·085022	·82618	·070244	1·0704679	$\bar{1}$·9170747	$\bar{2}$·8466092	75
75½	11·4942	·087001	·83014	·072223	1·0604770	$\bar{1}$·9191513	$\bar{2}$·8586755	75½
76	11·2316	·089035	·83402	·074257	1·0504400	$\bar{1}$·9211765	$\bar{2}$·8707374	76
76½	10·9739	·091125	·83782	·076347	1·0403602	$\bar{1}$·9231507	$\bar{2}$·8827920	76½
77	10·7212	·093274	·84156	·078496	1·0302415	$\bar{1}$·9250851	$\bar{2}$·8948475	77
77½	10·4734	·095480	·84522	·080702	1·0200874	$\bar{1}$·9269698	$\bar{2}$·9068843	77½
78	10·2306	·097746	·84881	·082968	1·0099015	$\bar{1}$·9288105	$\bar{2}$·9189106	78
78½	9·9928	·100072	·85232	·085294	0·9996870	$\bar{1}$·9306027	$\bar{2}$·9309185	78½
79	9·7600	·102459	·85576	·087681	0·9894479	$\bar{1}$·9323520	$\bar{2}$·9429055	79
79½	9·5321	·104909	·85913	·090131	0·9791870	$\bar{1}$·9340589	$\bar{2}$·9548742	79½
80	9·3091	107421	·86243	·092643	0·9689090	$\bar{1}$·9357239	$\bar{2}$·9668126	80
80½	9·0911	·109998	·86565	·095220	0·9586166	$\bar{1}$·9373423	$\bar{2}$·9787282	80½
81	8·8780	·112638	·86880	·097860	0·9483133	$\bar{1}$·9389198	$\bar{2}$·9906052	81
81½	8·6696	·115345	·87188	·100567	0·9380012	$\bar{1}$·9404567	$\bar{1}$·0024556	81½
82	8·4662	·118117	·87488	·103339	0·9276863	$\bar{1}$·9419485	$\bar{1}$·0142643	82
82½	8·2674	·120957	·87782	·106179	0·9173685	$\bar{1}$·9434055	$\bar{1}$·0260386	82½
83	8·0734	·123864	·88069	·109086	0·9070541	$\bar{1}$·9448231	$\bar{1}$·0377690	83
83½	7·8840	·126840	·88349	·112062	0·8967445	$\bar{1}$·9462016	$\bar{1}$·0494584	83½

HALF-YEARLY TABLE:—Males. Interest 3 per Cent.

Values of Annuities. Single and Half-yearly Premiums which insure £1 on the Life of a Male.

Age	Present Value of an **Annuity** of £1 payable every **Half Year.**	**Annuity** payable every **Half Year** which £1 will purchase.	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Half-yearly Premium** which will insure £1 over the **Whole Term of Life.**	$\lambda\left(\frac{N_x}{D_x}\right) = \lambda A_x$	$\lambda\ \Pi_x$	$\lambda\ \pi_x$	Age
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$1 - d\ A_x = \Pi_x$	$a_x - d = \pi_x$				x
	£	£	£	£				
84	7·6991	·129884	·88622	·115106	0·8864427	$\bar{1}$·9475415	$\bar{1}$·0610980	84
84½	7·5189	·132998	·88888	·118220	0·8761535	$\bar{1}$·9488431	$\bar{1}$·0726910	84½
85	7·3431	·136182	·89148	·121404	0·8658789	$\bar{1}$·9501116	$\bar{1}$·0842331	85
85½	7·1717	·139437	·89401	·124659	0·8556221	$\bar{1}$·9513424	$\bar{1}$·0957237	85½
86	7·0046	·142764	·89648	·127986	0·8453825	$\bar{1}$·9525406	$\bar{1}$·1071624	86
86½	6·8417	·146162	·89889	·131384	0·8351656	$\bar{1}$·9537065	$\bar{1}$·1185425	86½
87	6·6830	·149633	·90124	·134855	0·8249739	$\bar{1}$·9548405	$\bar{1}$·1298672	87
87½	6·5285	·153176	·90352	·138398	0·8148101	$\bar{1}$·9559378	$\bar{1}$·1411298	87½
88	6·3779	·156792	·90575	·142014	0·8046756	$\bar{1}$·9570083	$\bar{1}$·1523311	88
88½	6·2312	·160482	·90791	·145704	0·7945744	$\bar{1}$·9580428	$\bar{1}$·1634715	88½
89	6·0885	·164245	·91002	·149467	0·7845071	$\bar{1}$·9590509	$\bar{1}$·1745453	89
89½	5·9495	·168083	·91208	·153305	0·7744774	$\bar{1}$·9600329	$\bar{1}$·1855564	89½
90	5·8142	·171994	·91408	·157216	0·7644863	$\bar{1}$·9609842	$\bar{1}$·1964968	90
90½	5·6825	·175979	·91602	·161201	0·7545380	$\bar{1}$·9619050	$\bar{1}$·2073677	90½
91	5·5544	·180039	·91792	·165261	0·7446334	$\bar{1}$·9628048	$\bar{1}$·2181703	91
91½	5·4297	·184174	·91976	·169396	0·7347720	$\bar{1}$·9636745	$\bar{1}$·2289032	91½
92	5·3083	·188383	·92155	·173605	0·7249573	$\bar{1}$·9645189	$\bar{1}$·2395622	92
92½	5·1903	·192666	·92330	·177888	0·7151940	$\bar{1}$·9653428	$\bar{1}$·2501466	92½
93	5·0755	·197025	·92499	·182247	0·7054777	$\bar{1}$·9661370	$\bar{1}$·2606604	93
93½	4·9638	·201458	·92664	·186680	0·6958158	$\bar{1}$·9669110	$\bar{1}$·2710978	93½
94	4·8552	·205964	·92825	·191186	0·6862079	$\bar{1}$·9676650	$\bar{1}$·2814561	94
94½	4·7496	·210545	·92981	·195767	0·6766555	$\bar{1}$·9683942	$\bar{1}$·2917395	94½
95	4·6469	·215199	·93133	·200421	0·6671601	$\bar{1}$·9691036	$\bar{1}$·3019433	95
95½	4·5470	·219927	·93280	·205149	0·6577224	$\bar{1}$·9697885	$\bar{1}$·3120694	95½
96	4·4498	·224728	·93424	·209950	0·6483429	$\bar{1}$·9704585	$\bar{1}$·3221159	96
96½	4·3554	·229602	·93563	·214824	0·6390247	$\bar{1}$·9711041	$\bar{1}$·3320828	96½
97	4·2635	·234548	·93699	·219770	0·6297681	$\bar{1}$·9717350	$\bar{1}$·3419684	97
97½	4·1742	·239567	·93831	·224789	0·6205727	$\bar{1}$·9723463	$\bar{1}$·3517751	97½
98	4·0873	·244660	·93960	·229882	0·6114378	$\bar{1}$·9729430	$\bar{1}$·3615050	98
98½	4·0028	·249826	·94085	·235048	0·6023626	$\bar{1}$·9735204	$\bar{1}$·3711566	98½
99	3·9206	·255066	·94206	·240288	0·5933482	$\bar{1}$·9740786	$\bar{1}$·3807321	99
99½	3·8405	·260380	·94324	·245602	0·5843929	$\bar{1}$·9746222	$\bar{1}$·3902319	99½
100	3·7627	·265770	·94439	·250992	0·5754946	$\bar{1}$·9751514	$\bar{1}$·3996599	100
100½	3·6868	·271241	·94552	·256463	0·5666450	$\bar{1}$·9756707	$\bar{1}$·4090247	100½
101	3·6128	·276797	·94661	·262019	0·5578387	$\bar{1}$·9761711	$\bar{1}$·4183328	101
101½	3·5405	·282445	·94768	·267667	0·5490662	$\bar{1}$·9766617	$\bar{1}$·4275948	101½
102	3·4698	·288198	·94872	·273420	0·5403086	$\bar{1}$·9771381	$\bar{1}$·4368303	102
102½	3·4005	·294071	·94975	·279293	0·5315483	$\bar{1}$·9776093	$\bar{1}$·4460601	102½
103	3·3322	·300103	·95076	·285325	0·5227303	$\bar{1}$·9780709	$\bar{1}$·4553398	103
103½	3·2645	·306326	·95176	·291548	0·5138165	$\bar{1}$·9785274	$\bar{1}$·4647100	103½
104	3·1967	·312825	·95276	·298047	0·5046982	$\bar{1}$·9789835	$\bar{1}$·4742848	104
104½	3·1278	·319714	·95378	·304936	0·4952382	$\bar{1}$·9794482	$\bar{1}$·4842087	104½
105	3·0569	·327128	·95482	·312350	0·4852829	$\bar{1}$·9799215	$\bar{1}$·4946415	105
105½	2·9819	·335356	·95593	·320578	0·4744944	$\bar{1}$·9804261	$\bar{1}$·5059337	105½
106	2·8985	·345008	·95717	·330230	0·4621709	$\bar{1}$·9809891	$\bar{1}$·5188165	106
106½	2·8032	·356733	·95857	·341955	0·4476562	$\bar{1}$·9816238	$\bar{1}$·5339690	106½
107	2·6866	·372224	·96030	·357446	0·4291956	$\bar{1}$·9824069	$\bar{1}$·5532105	107
107½	2·5391	·393839	·96248	·379061	0·4046814	$\bar{1}$·9833917	$\bar{1}$·5787091	107½
108	2·3396	·427423	·96542	·412645	0·3691423	$\bar{1}$·9847163	$\bar{1}$·6155766	108
108½	2·0610	·485212	·96954	·470434	0·3140683	$\bar{1}$·9865657	$\bar{1}$·6724987	108½
109	1·6462	·607459	·97567	·592681	0·2164832	$\bar{1}$·9893030	$\bar{1}$·7728210	109
109½	1·0113	·988786	·98505	·974008	0·0048976	$\bar{1}$·9934583	$\bar{1}$·9885625	109½

HALF-YEARLY TABLE:—FEMALES. Interest 3 per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	488,255	19,035,744	7·2795699	28	132,687	5,417,752	6·7338192
0½	436,298	18,547,489	7·2682852	28½	130,061	5,285,065	6·7230503
1	410,086	18,111,191	7·2579470	29	127,482	5,155,004	6·7122290
1½	388,669	17,701,105	7·2480004	29½	124,947	5,027,522	6·7013540
2	373,408	17,312,436	7·2383581	30	122,457	4,902,575	6·6904243
2½	361,257	16,939,028	7·2288885	30½	120,011	4,780,118	6·6794386
3	349,629	16,577,771	7·2195261	31	117,608	4,660,107	6·6683959
3½	339,938	16,228,142	7·2102688	31½	115,247	4,542,499	6·6572949
4	331,166	15,888,204	7·2010748	32	112,929	4,427,252	6·6461343
4½	323,154	15,557,038	7·1919270	32½	110,651	4,314,323	6·6349126
5	315,767	15,233,884	7·1828107	33	108,414	4,203,672	6·6236288
5½	308,891	14,918,117	7·1737140	33½	106,217	4,095,258	6·6122813
6	302,433	14,609,226	7·1646272	34	104,059	3,989,041	6·6008685
6½	296,312	14,306,793	7·1555423	34½	101,939	3,884,982	6·5893890
7	290,462	14,010,481	7·1464530	35	99,858	3,783,043	6·5778413
7½	284,812	13,720,019	7·1373547	35½	97,814	3,683,185	6·5662235
8	279,381	13,435,207	7·1282444	36	95,806	3,585,371	6·5545341
8½	274,150	13,155,826	7·1191182	36½	93,834	3,489,565	6·5427712
9	269,100	12,881,676	7·1099724	37	91,898	3,395,731	6·5309332
9½	264,214	12,612,576	7·1008038	37½	89,997	3,303,833	6·5190181
10	259,477	12,348,362	7·0916094	38	88,129	3,213,836	6·5070237
10½	254,873	12,088,885	7·0823863	38½	86,296	3,125,707	6·4949483
11	250,390	11,834,012	7·0731320	39	84,495	3,039,411	6·4827894
11½	246,017	11,583,622	7·0638444	39½	82,727	2,954,916	6·4705452
12	241,743	11,337,605	7·0545214	40	80,990	2,872,189	6·4582131
12½	237,557	11,095,862	7·0451610	40½	79,285	2,791,199	6·4457908
13	233,452	10,858,305	7·0357620	41	77,610	2,711,914	6·4332759
13½	229,419	10,624,853	7·0263230	41½	75,966	2,634,304	6·4206659
14	225,453	10,395,434	7·0168427	42	74,351	2,558,338	6·4079580
14½	221,546	10,169,981	7·0073203	42½	72,766	2,483,987	6·3951493
15	217,694	9,948,435	6·9977547	43	71,208	2,411,221	6·3822370
15½	213,891	9,730,741	6·9881459	43½	69,679	2,340,013	6·3692184
16	210,135	9,516,850	6·9784932	44	68,178	2,270,334	6·3560898
16½	206,421	9,306,715	6·9687964	44½	66,703	2,202,156	6·3428481
17	202,746	9,100,294	6·9590554	45	65,255	2,135,453	6·3294900
17½	199,110	8,897,548	6·9492704	45½	63,834	2,070,198	6·3160119
18	195,509	8,698,438	6·9394413	46	62,437	2,006,364	6·3024098
18½	191,942	8,502,929	6·9295686	46½	61,066	1,943,927	6·2886800
19	188,409	8,310,987	6·9196527	47	59,720	1,882,861	6·2748183
19½	184,910	8,122,578	6·9096939	47½	58,397	1,823,141	6·2608202
20	181,444	7,937,668	6·8996929	48	57,099	1,764,744	6·2466817
20½	178,000	7,756,224	6·8896503	48½	55,824	1,707,645	6·2323976
21	174,612	7,578,224	6·8795674	49	54,572	1,651,821	6·2179631
21½	171,279	7,403,612	6·8694436	49½	53,342	1,597,249	6·2033727
22	168,000	7,232,333	6·8592784	50	52,135	1,543,907	6·1886212
22½	164,775	7,064,333	6·8490712	50½	50,949	1,491,772	6·1737025
23	161,603	6,899,558	6·8388213	51	49,785	1,440,823	6·1586106
23½	158,484	6,737,955	6·8285281	51½	48,642	1,391,038	6·1433390
24	155,417	6,579,471	6·8181910	52	47,519	1,342,396	6·1278806
24½	152,402	6,424,054	6·8078092	52½	46,417	1,294,877	6·1122286
25	149,438	6,271,652	6·7973820	53	45,334	1,248,460	6·0963746
25½	146,524	6,122,214	6·7869085	53½	44,271	1,203,126	6·0803111
26	143,659	5,975,690	6·7763881	54	43,228	1,158,855	6·0640292
26½	140,844	5,832,031	6·7658199	54½	42,175	1,115,627	6·0475190
27	138,077	5,691,187	6·7552028	55	41,134	1,073,452	6·0307827
27½	135,358	5,553,110	6·7445363	55½	40,106	1,032,318	6·0138135

HALF-YEARLY TABLE:—FEMALES. Interest 3 per Cent.

Age (x)	D_x	N_x	λ N_x	Age (x)	D_x	N_x	λ N_x
56	39,090	992,212	5·9966045	84	2,146·1	17,450·3	4·2418029
56½	38,086	953,122	5·9791485	84½	1,927·8	15,304·2	4·1848107
57	37,095	915,036	5·9614382	85	1,725·8	13,376·4	4·1263393
57½	36,116	877,941	5·9434653	85½	1,539·5	11,650·6	4·0663483
58	35,150	841,825	5·9252218	86	1,368·4	10,111·1	4·0047984
58½	34,196	806,675	5·9066986	86½	1,211·8	8,742·7	3·9416456
59	33,254	772,479	5·8878866	87	1,069·0	7,530·9	3·8768469
59½	32,325	739,225	5·8687767	87½	939·32	6,461·94	3·8103629
60	31,407	706,900	5·8493580	88	822·05	5,522·62	3·7421452
60½	30,500	675,493	5·8296209	88½	716·43	4,700·57	3·6721505
61	29,606	644,993	5·8095550	89	621·73	3,984·14	3·6003346
61½	28,722	615,387	5·7891483	89½	537·20	3,362·41	3·5266507
62	27,850	586,665	5·7683902	90	462·08	2,825·21	3·4510507
62½	26,989	558,815	5·7472681	90½	395·64	2,363·13	3·3734876
63	26,139	531,826	5·7257696	91	337·15	1,967·49	3·2939125
63½	25,300	505,687	5·7038818	91½	285·93	1,630·34	3·2122782
64	24,472	480,387	5·6815913	92	241·29	1,344·41	3·1285317
64½	23,654	455,915	5·6588839	92½	202·58	1,103·12	3·0426228
65	22,847	432,261	5·6357460	93	169·20	900·54	2·9545030
65½	22,050	409,414	5·6121627	93½	140·57	731·34	2·8641193
66	21,265	387,364	5·5881193	94	116·15	590·77	2·7714184
66½	20,490	366,099	5·5635985	94½	95·442	474·619	2·6763451
67	19,725	345,609	5·5385850	95	77·976	379·177	2·5788420
67½	18,972	325,884	5·5130630	95½	63·335	301·201	2·4788564
68	18,229	306,912	5·4870138	96	51·137	237·866	2·3763324
68½	17,498	288,683	5·4604212	96½	41·037	186·729	2·2712118
69	16,779	271,185	5·4332657	97	32·726	145·692	2·1634357
69½	16,071	254,406	5·4055274	97½	25·933	112·966	2·0529478
70	15,374	238,335	5·3771878	98	20·416	87·033	1·9396840
70½	14,691	222,961	5·3482289	98½	15·966	66·617	1·8235851
71	14,019	208,270	5·3186267	99	12·401	50·651	1·7045880
71½	13,361	194,251	5·2883632	99½	9·5657	38·2495	1·5826258
72	12,716	180,890	5·2574146	100	7·3264	28·6838	1·4576367
72½	12,084	168,174	5·2257588	100½	5·5708	21·3574	1·3295484
73	11,467	156,090	5·1933751	101	4·2047	15·7866	1·1982886
73½	10,864	144,623	5·1602374	101½	3·1498	11·5819	1·0637799
74	10,276	133,759	5·1263231	102	2·3415	8·4321	0·9259357
74½	9,703·8	123,483·2	5·0916079	102½	1·7270	6·0906	0·7846601
75	9,147·1	113,779·4	5·0560636	103	1·2636	4·3636	0·6398449
75½	8,606·6	104,632·3	5·0196658	103½	·9171	3·1000	0·4913617
76	8,082·6	96,025·7	4·9823875	104	·6601	2·1829	0·3390338
76½	7,575·6	87,943·1	4·9442018	104½	·4711	1·5228	0·1826429
77	7,085·9	80,367·5	4·9050805	105	·3333	1·0517	0·0218919
77½	6,613·9	73,281·6	4·8649949	105½	·2337	·7184	$\bar{1}$·8563663
78	6,159·8	66,667·7	4·8239155	106	·1625	·4847	$\bar{1}$·6854730
78½	5,723·8	60,507·9	4·7818121	106½	·1119	·3222	$\bar{1}$·5081255
79	5,306·3	54,784·1	4·7386545	107	·0764	·2103	$\bar{1}$·3228393
79½	4,907·2	49,477·8	4·6944104	107½	·0516	·1339	$\bar{1}$·1267806
80	4,526·8	44,570·6	4·6490485	108	·0346	·0823	$\bar{2}$·9153998
80½	4,165·0	40,043·8	4·6025353	108½	·0229	·0477	$\bar{2}$·6785184
81	3,821·9	35,878·8	4·5548379	109	·0150	·0248	$\bar{2}$·3944517
81½	3,497·4	32,056·9	4·5059215	109½	·0098	·0098	$\bar{3}$·9912261
82	3,191·3	28,559·5	4·4557506				
82½	2,903·4	25,368·2	4·4042896				
83	2,633·4	22,464·8	4·3515025				
83½	2,381·1	19,831·4	4·2973534				

HALF-YEARLY TABLE :—FEMALES. Interest 3 per Cent.

VALUES of ANNUITIES.* SINGLE and HALF-YEARLY PREMIUMS which insure £1 on the LIFE of a FEMALE.

Age	**Present Value** of an **Annuity** of £1 payable every **Half Year.**	**Annuity** payable every **Half Year** which £1 will purchase.	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Half-yearly Premium** which will insure £1 over the **Whole Term of Life.**	$\lambda\left(\frac{N_x}{D_x}\right) = \lambda A_x$	$\lambda\, \Pi_x$	$\lambda\, \pi_x$	Age
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$1 - d\, A_x = \Pi_x$	$a_x - d = \pi_x$				x
	£	£	£	£				
0	38·9873	·025649	·42383	·010871	1·5909234	$\bar{1}$·6271917	$\bar{2}$·0362695	0
0½	42·5110	·023523	·37176	·008745	1·6285017	$\bar{1}$·5702627	$\bar{3}$·9417598	0½
1	44·1644	·022643	·34732	·007865	1·6450722	$\bar{1}$·5407298	$\bar{3}$·8956987	1
1½	45·5429	·021957	·32695	·007179	1·6584208	$\bar{1}$·5144813	$\bar{3}$·8560640	1½
2	46·3633	·021569	·31483	·006791	1·6661744	$\bar{1}$·4980761	$\bar{3}$·8319337	2
2½	46·8891	·021327	·30706	·006549	1·6710720	$\bar{1}$·4872232	$\bar{3}$·8161750	2½
3	47·4154	·021090	·29928	·006312	1·6759191	$\bar{1}$·4760777	$\bar{3}$·8001670	3
3½	47·7385	·020947	·29450	·006169	1·6788687	$\bar{1}$·4690853	$\bar{3}$·7902148	3½
4	47·9765	·020844	·29099	·006066	1·6810288	$\bar{1}$·4638781	$\bar{3}$·7829024	4
4½	48·1413	·020772	·28855	·005994	1·6825179	$\bar{1}$·4602211	$\bar{3}$·7777167	4½
5	48·2441	·020728	·28703	·005950	1·6834445	$\bar{1}$·4579273	$\bar{3}$·7745170	5
5½	48·2957	·020706	·28627	·005928	1·6839081	$\bar{1}$·4567758	$\bar{3}$·7729082	5½
6	48·3057	·020702	·28612	·005924	1·6839981	$\bar{1}$·4565482	$\bar{3}$·7726150	6
6½	48·2829	·020711	·28646	·005933	1·6837935	$\bar{1}$·4570640	$\bar{3}$·7732743	6½
7	48·2351	·020732	·28717	·005954	1·6833631	$\bar{1}$·4581391	$\bar{3}$·7748088	7
7½	48·1723	·020759	·28809	·005981	1·6827970	$\bar{1}$·4595282	$\bar{3}$·7767738	7½
8	48·0892	·020795	·28932	·006017	1·6820474	$\bar{1}$·4613785	$\bar{3}$·7793800	8
8½	47·9876	·020839	·29082	·006061	1·6811295	$\bar{1}$·4636243	$\bar{3}$·7825443	8½
9	47·8694	·020890	·29257	·006112	1·6800580	$\bar{1}$·4662298	$\bar{3}$·7861833	9
9½	47·7361	·020948	·29454	·006170	1·6788472	$\bar{1}$·4691443	$\bar{3}$·7902852	9½
10	47·5895	·021013	·29671	·006235	1·6775109	$\bar{1}$·4723322	$\bar{3}$·7948365	10
10½	47·4310	·021083	·29905	·006305	1·6760623	$\bar{1}$·4757438	$\bar{3}$·7996851	10½
11	47·2622	·021159	·30154	·006381	1·6745142	$\bar{1}$·4793449	$\bar{3}$·8048887	11
11½	47·0846	·021238	·30417	·006460	1·6728790	$\bar{1}$·4831164	$\bar{3}$·8102325	11½
12	46·8995	·021322	·30690	·006544	1·6711683	$\bar{1}$·4869969	$\bar{3}$·8158433	12
12½	46·7082	·021410	·30973	·006632	1·6693932	$\bar{1}$·4909833	$\bar{3}$·8216445	12½
13	46·5120	·021500	·31263	·006722	1·6675646	$\bar{1}$·4950307	$\bar{3}$·8274985	13
13½	46·3119	·021593	·31559	·006815	1·6656927	$\bar{1}$·4991232	$\bar{3}$·8334659	13½
14	46·1091	·021688	·31858	·006910	1·6637867	$\bar{1}$·5032185	$\bar{3}$·8394780	14
14½	45·9046	·021784	·32161	·007006	1·6618560	$\bar{1}$·5073295	$\bar{3}$·8454701	14½
15	45·6992	·021882	·32464	·007104	1·6599084	$\bar{1}$·5114020	$\bar{3}$·8515030	15
15½	45·4938	·021981	·32768	·007203	1·6579525	$\bar{1}$·5154499	$\bar{3}$·8575134	15½
16	45·2893	·022080	·33070	·007302	1·6559951	$\bar{1}$·5194342	$\bar{3}$·8634418	16
16½	45·0861	·022180	·33370	·007402	1·6540430	$\bar{1}$·5233562	$\bar{3}$·8693491	16½
17	44·8851	·022279	·33667	·007501	1·6521022	$\bar{1}$·5272044	$\bar{3}$·8751192	17
17½	44·6867	·022378	·33961	·007600	1·6501781	$\bar{1}$·5309805	$\bar{3}$·8808136	17½
18	44·4913	·022476	·34249	·007698	1·6482754	$\bar{1}$·5346479	$\bar{3}$·8863779	18
18½	44·2995	·022574	·34533	·007796	1·6463983	$\bar{1}$·5382343	$\bar{3}$·8918718	18½
19	44·1113	·022670	·34811	·007892	1·6445502	$\bar{1}$·5417165	$\bar{3}$·8971871	19
19½	43·9272	·022765	·35083	·007987	1·6427338	$\bar{1}$·5450967	$\bar{3}$·9023837	19½
20	43·7473	·022859	·35349	·008081	1·6409513	$\bar{1}$·5483771	$\bar{3}$·9074651	20
20½	43·5743	·022949	·35605	·008171	1·6392300	$\bar{1}$·5515110	$\bar{3}$·9122752	20½
21	43·4004	·023041	·35862	·008263	1·6374932	$\bar{1}$·5546345	$\bar{3}$·9171378	21
21½	43·2255	·023134	·36120	·008356	1·6357400	$\bar{1}$·5577477	$\bar{3}$·9219984	21½
22	43·0496	·023229	·36380	·008451	1·6339692	$\bar{1}$·5608627	$\bar{3}$·9269081	22
22½	42·8726	·023325	·36641	·008547	1·6321800	$\bar{1}$·5639673	$\bar{3}$·9318137	22½
23	42·6944	·023422	·36905	·008644	1·6303713	$\bar{1}$·5670852	$\bar{3}$·9367148	23
23½	42·5150	·023521	·37170	·008743	1·6285421	$\bar{1}$·5701926	$\bar{3}$·9416605	23½
24	42·3342	·023622	·37437	·008844	1·6266914	$\bar{1}$·5733010	$\bar{3}$·9466487	24
24½	42·1520	·023724	·37706	·008946	1·6248183	$\bar{1}$·5764105	$\bar{3}$·9516289	24½
25	41·9683	·023827	·37978	·009049	1·6229216	$\bar{1}$·5795321	$\bar{3}$·9566006	25
25½	41·7831	·023933	·38252	·009155	1·6210004	$\bar{1}$·5826541	$\bar{3}$·9616583	25½
26	41·5962	·024041	·38528	·009263	1·6190538	$\bar{1}$·5857765	$\bar{3}$·9667517	26
26½	41·4077	·024150	·38806	·009372	1·6170808	$\bar{1}$·5888989	$\bar{3}$·9718323	26½
27	41·2173	·024262	·39088	·009484	1·6150800	$\bar{1}$·5920434	$\bar{3}$·9769915	27
27½	41·0252	·024375	·39372	·009597	1·6130509	$\bar{1}$·5951875	$\bar{3}$·9821355	27½

* **Note.**—The Value of an Annuity of £·5 payable at the commencement of every **half year** that the Annuitant lives, making £1 a year, is obtained by dividing the number in column 2. by *two*. The **Sum Insured** is payable at the end of the **half year** of age in which the death occurs.

HALF-YEARLY TABLE :—FEMALES. Interest 3 per Cent.

VALUES of ANNUITIES. SINGLE and HALF-YEARLY PREMIUMS which insure £1 on the LIFE of a FEMALE.

Age	**Present Value** of an **Annuity** of £1 payable every **Half Year.**	**Annuity** payable every **Half Year** which £1 will purchase.	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Half-yearly Premium** which will insure £1 over the **Whole Term of Life.**	$\lambda\left(\frac{N_x}{D_x}\right)$ $=\lambda A_x$	$\lambda\,\Pi_x$	$\lambda\,\pi_x$	Age
x	$\frac{N_x}{D_x}=A_x$	$\frac{D_x}{N_x}=a_x$	$1-d\ A_x=\Pi_x$	$a_x-d=\pi_x$				x
	£	£	£	£				
28	40·8312	·024491	·39658	·009713	1·6109922	$\bar{1}$·5983308	$\bar{3}$·9873534	28
28½	40·6352	·024609	·39948	·009831	1·6089027	$\bar{1}$·6014950	$\bar{3}$·9925977	28½
29	40·4372	·024730	·40241	·009952	1·6067816	$\bar{1}$·6046688	$\bar{3}$·9979104	29
29½	40·2372	·024853	·40536	·010075	1·6046278	$\bar{1}$·6078409	$\bar{2}$·0032451	29½
30	40·0350	·024978	·40835	·010200	1·6024402	$\bar{1}$·6110326	$\bar{2}$·0086002	30
30½	39·8307	·025106	·41137	·010328	1·6002177	$\bar{1}$·6142326	$\bar{2}$·0140162	30½
31	39·6241	·025237	·41442	·010459	1·5979592	$\bar{1}$·6174407	$\bar{2}$·0194902	31
31½	39·4152	·025371	·41751	·010593	1·5956637	$\bar{1}$·6206669	$\bar{2}$·0250190	31½
32	39·2040	·025508	·42063	·010730	1·5933299	$\bar{1}$·6239002	$\bar{2}$·0305997	32
32½	38·9903	·025647	·42379	·010869	1·5909566	$\bar{1}$·6271507	$\bar{2}$·0361896	32½
33	38·7742	·025790	·42698	·011012	1·5885430	$\bar{1}$·6304075	$\bar{2}$·0418662	33
33½	38·5556	·025937	·43021	·011159	1·5860876	$\bar{1}$·6336805	$\bar{2}$·0476253	33½
34	38·3345	·026086	·43348	·011308	1·5835893	$\bar{1}$·6369691	$\bar{2}$·0533858	34
34½	38·1107	·026239	·43679	·011461	1·5810468	$\bar{1}$·6402727	$\bar{2}$·0592225	34½
35	37·8843	·026396	·44013	·011618	1·5784590	1·6435810	$\bar{2}$·0651314	35
35½	37·6551	·026557	·44352	·011779	1·5758243	1·6469132	$\bar{2}$·0711084	35½
36	37·4233	·026721	·44695	·011943	1·5731417	$\bar{1}$·6502589	$\bar{2}$·0771134	36
36½	37·1886	·026890	·45041	·012112	1·5704096	$\bar{1}$·6536080	$\bar{2}$·0832159	36½
37	36·9511	·027063	·45393	·012285	1·5676269	$\bar{1}$·6569889	$\bar{2}$·0893752	37
37½	36·7106	·027240	·45748	·012462	1·5647920	$\bar{1}$·6603721	$\bar{2}$·0955877	37½
38	36·4673	·027422	·46107	·012644	1·5619033	$\bar{1}$·6637669	$\bar{2}$·1018845	38
38½	36·2209	·027608	·46472	·012830	1·5589596	$\bar{1}$·6671914	$\bar{2}$·1082267	38½
39	35·9715	·027800	·46840	·013022	1·5559590	$\bar{1}$·6706169	$\bar{2}$·1146777	39
39½	35·7191	·027996	·47213	·013218	1·5529002	$\bar{1}$·6740616	$\bar{2}$·1211657	39½
40	35·4635	·028198	·47591	·013420	1·5497812	$\bar{1}$·6775248	$\bar{2}$·1277525	40
40½	35·2047	·028405	·47973	·013627	1·5466005	$\bar{1}$·6809969	$\bar{2}$·1344003	40½
41	34·9427	·028618	·48361	·013840	1·5433562	$\bar{1}$·6844953	$\bar{2}$·1411361	41
41½	34·6774	·028837	·48753	·014059	1·5400466	$\bar{1}$·6880013	$\bar{2}$·1479544	41½
42	34·4088	·029062	·49150	·014284	1·5366697	$\bar{1}$·6915235	$\bar{2}$·1548498	42
42½	34·1368	·029294	·49551	·014516	1·5332232	$\bar{1}$·6950524	$\bar{2}$·1618470	42½
43	33·8614	·029532	·49958	·014754	1·5297052	$\bar{1}$·6986050	$\bar{2}$·1689098	43
43½	33·5826	·029777	·50371	·014999	1·5261138	$\bar{1}$·7021806	$\bar{2}$·1760623	43½
44	33·3002	·030030	·50788	·015252	1·5224462	$\bar{1}$·7057611	$\bar{2}$·1833268	44
44½	33·0142	·030290	·51211	·015512	1·5187001	$\bar{1}$·7093633	$\bar{2}$·1906678	44½
45	32·7245	·030558	·51639	·015780	1·5148732	$\bar{1}$·7129778	$\bar{2}$·1981070	45
45½	32·4312	.030835	·52072	·016057	1·5109628	$\bar{1}$·7166043	$\bar{2}$·2056644	45½
46	32·1341	·031120	·52511	·016342	1·5069658	$\bar{1}$·7202503	$\bar{2}$·2133052	46
46½	31·8331	·031414	·52956	·016636	1·5028796	$\bar{1}$·7239152	$\bar{2}$·2210489	46½
47	31·5283	·031718	·53406	·016940	1·4987010	$\bar{1}$·7275901	$\bar{2}$·2289134	47
47½	31·2195	·032031	·53863	·017253	1·4944265	$\bar{1}$·7312905	$\bar{2}$·2368646	47½
48	30·9067	·032355	·54325	·017577	1·4900533	$\bar{1}$ 7349997	$\bar{2}$·2449448	48
48½	30·5898	·032691	·54793	·017913	1·4855772	$\bar{1}$·7387251	$\bar{2}$·2531683	48½
49	30·2688	·033037	·55268	·018259	1·4809946	$\bar{1}$·7424737	$\bar{2}$·2614770	49
49½	29·9434	·033396	·55749	·018618	1·4763012	$\bar{1}$·7462371	$\bar{2}$·2699330	49½
50	29·6137	·033768	·56236	·018990	1·4714929	$\bar{1}$·7500144	$\bar{2}$·2785250	50
50½	29·2796	·034153	·56730	·019375	1·4665650	$\bar{1}$·7538128	$\bar{2}$·2872417	50½
51	28·9409	·034553	·57230	·019775	1·4615126	$\bar{1}$·7576237	$\bar{2}$·2961165	51
51½	28·5977	·034968	·57737	·020190	1·4563306	$\bar{1}$·7614542	$\bar{2}$·3051363	51½
52	28·2497	·035399	·58252	·020621	1·4510132	$\bar{1}$·7653108	$\bar{2}$·3143097	52
52½	27·8968	·035846	·58773	·021068	1·4455549	$\bar{1}$·7691779	$\bar{2}$·3236233	52½
53	27·5390	·036312	·59302	·021534	1·4399487	$\bar{1}$·7730693	$\bar{2}$·3331247	53
53½	27·1762	·036797	·59838	·022019	1·4341885	$\bar{1}$·7769771	$\bar{2}$·3427976	53½
54	26·8082	·037302	·60382	·022524	1·4282669	$\bar{1}$·7809075	$\bar{2}$·3526455	54
54½	26·4524	·037804	·60908	·023026	1·4224658	$\bar{1}$·7846743	$\bar{2}$·3622185	54½
55	26·0964	·038319	·61434	·023541	1·4165810	$\bar{1}$·7884088	$\bar{2}$·3718249	55
55½	25·7400	·038850	·61961	·024072	1·4106081	$\bar{1}$·7921184	$\bar{2}$·3815122	55½

HALF-YEARLY TABLE:—FEMALES. Interest 3 per Cent.

VALUES OF ANNUITIES. SINGLE and HALF-YEARLY PREMIUMS which insure £1 on the LIFE of a FEMALE.

Age	**Present Value** of an **Annuity** of £1 payable every **Half Year.**	**Annuity** payable every **Half Year** which £1 will purchase.	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Half-yearly Premium** which will insure £1 over the **Whole Term of Life.**	$\lambda\left(\frac{N_x}{D_x}\right) = \lambda A_x$	$\lambda \Pi_x$	$\lambda \pi_x$	Age
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$1 - d\ A_x = \Pi_x$	$a_x - d = \pi_x$				x
	£	£	£	£				
56	25·3830	·039396	·62488	·024618	1·4045430	$\bar{1}$·7957966	$\bar{2}$·3912528	56
56½	25·0255	·039959	·63017	·025181	1·3983821	$\bar{1}$·7994577	$\bar{2}$·4010730	56½
57	24·6673	·040539	·63546	·025761	1·3921224	$\bar{1}$·8030882	$\bar{2}$·4109627	57
57½	24·3086	·041138	·64076	·026360	1·3857605	$\bar{1}$·8066954	$\bar{2}$·4209454	57½
58	23·9494	·041755	·64607	·026977	1·3792941	$\bar{1}$·8102796	$\bar{2}$·4309937	58
58½	23·5896	·042392	·65139	·027614	1·3727204	$\bar{1}$·8138411	$\bar{2}$·4411293	58½
59	23·2294	·043049	·65671	·028271	1·3660373	$\bar{1}$·8173736	$\bar{2}$·4513412	59
59½	22·8688	·043728	·66204	·028950	1·3592434	$\bar{1}$·8208842	$\bar{2}$·4616486	59½
60	22·5080	·044429	·66737	·029651	1·3523361	$\bar{1}$·8243667	$\bar{2}$·4720393	60
60½	22·1470	·045153	·67270	·030375	1·3453150	$\bar{1}$·8278214	$\bar{2}$·4825163	60½
61	21·7861	·045901	·67804	·031123	1·3381793	$\bar{1}$·8312553	$\bar{2}$·4930815	61
61½	21·4253	·046674	·68337	·031896	1·3309275	$\bar{1}$·8346559	$\bar{2}$·5037362	61½
62	21·0649	·047472	·68870	·032694	1·3235601	$\bar{1}$·8380301	$\bar{2}$·5144681	62
62½	20·7051	·048297	·69401	·033519	1·3160763	$\bar{1}$·8413657	$\bar{2}$·5252911	62½
63	20·3459	·049150	·69932	·034372	1·3084761	$\bar{1}$·8446759	$\bar{2}$·5362048	63
63½	19·9876	·050031	·70462	·035253	1·3007598	$\bar{1}$·8479550	$\bar{2}$·5471961	63½
64	19·6303	·050942	·70990	·036164	1·2929279	$\bar{1}$·8511972	$\bar{2}$·5582765	64
64½	19·2744	·051882	·71516	·037104	1·2849807	$\bar{1}$·8544032	$\bar{2}$·5694207	64½
65	18·9199	·052854	·72039	·038076	1·2769197	$\bar{1}$·8575677	$\bar{2}$·5806513	65
65½	18·5672	·053858	·72561	·039080	1·2687461	$\bar{1}$·8607033	$\bar{2}$·5919546	65½
66	18·2164	·054896	·73079	·040118	1·2604616	$\bar{1}$·8637926	$\bar{2}$·6033393	66
66½	17·8676	·055967	·73595	·041189	1·2520663	$\bar{1}$·8668483	$\bar{2}$·6147812	66½
67	17·5212	·057074	·74107	·042296	1·2435627	$\bar{1}$·8698592	$\bar{2}$·6262993	67
67½	17·1773	·058217	·74615	·043439	1·2349537	$\bar{1}$·8728261	$\bar{2}$·6378798	67½
68	16·8360	·059396	·75119	·044618	1·2262399	$\bar{1}$·8757498	$\bar{2}$·6495101	68
68½	16·4978	·060614	·75619	·045836	1·2174251	$\bar{1}$·8786309	$\bar{2}$·6612067	68½
69	16·1626	·061871	·76114	·047093	1·2085105	$\bar{1}$·8814645	$\bar{2}$·6729564	69
69½	15·8306	·063169	·76605	·048391	1·1994975	$\bar{1}$·8842571	$\bar{2}$·6847646	69½
70	15·5021	·064508	·77091	·049730	1·1903898	$\bar{1}$·8870037	$\bar{2}$·6966185	70
70½	15·1772	·065888	·77571	·051110	1·1811920	$\bar{1}$·8896994	$\bar{2}$·7085059	70½
71	14·8561	·067313	·78045	·052535	1·1719035	$\bar{1}$·8923451	$\bar{2}$·7204487	71
71½	14·5389	·068781	·78514	·054003	1·1625304	$\bar{1}$·8949471	$\bar{2}$·7324179	71½
72	14·2257	·070295	·78977	·055517	1·1530738	$\bar{1}$·8975006	$\bar{2}$·7444260	72
72½	13·9167	·071856	·79433	·057078	1·1435370	$\bar{1}$ 9000010	$\bar{2}$·7564687	72½
73	13·6121	·073464	·79884	·058686	1·1339254	$\bar{1}$·9024598	$\bar{2}$·7685345	73
73½	13·3119	·075121	·80327	·060343	1·1242397	$\bar{1}$·9048615	$\bar{2}$·7806269	73½
74	13·0162	·076827	·80764	·062049	1·1144850	$\bar{1}$·9072178	$\bar{2}$·7927348	74
74½	12·7252	·078584	·81194	·063806	1·1046650	$\bar{1}$·9095239	$\bar{2}$·8048615	74½
75	12·4389	·080393	·81617	·065615	1·0947806	$\bar{1}$·9117806	$\bar{2}$·8170031	75
75½	12·1573	·082255	·82034	·067477	1·0848367	$\bar{1}$·9139939	$\bar{2}$·8291558	75½
76	11·8806	·084171	·82443	·069393	1·0748368	$\bar{1}$·9161538	$\bar{2}$·8413157	76
76½	11·6087	·086142	·82844	·071364	1·0647848	$\bar{1}$·9182611	$\bar{2}$·8534792	76½
77	11·3419	·088169	·83239	·073391	1·0546841	$\bar{1}$·9203269	$\bar{2}$·8656428	77
77½	11·0800	·090253	·83626	·075475	1·0445384	$\bar{1}$·9223413	$\bar{2}$·8778031	77½
78	10·8231	·092395	·84005	·077617	1·0343511	$\bar{1}$·9243051	$\bar{2}$·8899569	78
78½	10·5712	·094596	·84377	·079818	1·0241258	$\bar{1}$·9262241	$\bar{2}$·9021008	78½
79	10·3244	·096858	·84742	·082080	1·0138665	$\bar{1}$·9280987	$\bar{2}$·9142373	79
79½	10·0827	·099180	·85099	·084402	1·0035760	$\bar{1}$·9299245	$\bar{2}$·9263527	79½
80	9·8460	·101564	·85449	·086786	0·9932583	$\bar{1}$·9317070	$\bar{2}$·9384497	80
80½	9·6143	·104012	·85792	·089234	0·9829177	$\bar{1}$·9334468	$\bar{2}$·9505304	80½
81	9·3877	·106523	·86127	·091745	0·9725569	$\bar{1}$·9351393	$\bar{2}$·9625824	81
81½	9·1660	·109099	·86454	·094321	0·9621794	$\bar{1}$·9367851	$\bar{2}$·9746084	81½
82	8·9493	·111741	·86774	·096963	0·9517881	$\bar{1}$·9383896	$\bar{2}$·9866060	82
82½	8·7375	·114449	·87087	·099671	0·9413867	$\bar{1}$·9399533	$\bar{2}$·9985688	82½
83	8·5306	·117225	·87393	·102447	0·9309788	$\bar{1}$·9414766	$\bar{1}$·0104994	83
83½	8·3285	·120069	·87692	·105291	0·9205692	$\bar{1}$·9429600	$\bar{1}$·0223912	83½

HALF-YEARLY TABLE :—FEMALES. Interest 3 per Cent.

VALUES of ANNUITIES. SINGLE and HALF-YEARLY PREMIUMS which insure £1 on the LIFE of a FEMALE.

Age	Present Value of an Annuity of £1 payable every **Half Year.**	Annuity payable every **Half Year** which £1 will purchase.	Single **Premium** which will insure £1 over the **Whole Term of Life.**	Half-yearly **Premium** which will insure £1 over the **Whole Term of Life.**	$\lambda\left(\frac{N_x}{D_x}\right) = \lambda A_x$	$\lambda \Pi_x$	$\lambda \pi_x$	Age
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$1-d A_x = \Pi_x$	$a_x - d = \pi_x$				x
	£	£	£	£				
84	8·1313	·122982	·87983	·108204	0·9101596	$\bar{1}$·9443988	$\bar{1}$·0342433	84
84½	7·9387	·125965	·88268	·111187	0·8997516	$\bar{1}$·9458033	$\bar{1}$·0460541	84½
85	7·7509	·129018	·88546	·114240	0·8893503	$\bar{1}$·9471689	$\bar{1}$·0578182	85
85½	7·5676	·132142	·88816	·117364	0·8789584	$\bar{1}$·9484912	$\bar{1}$·0695349	85½
86	7·3889	·135338	·89080	·120560	0·8685807	$\bar{1}$·9497802	$\bar{1}$·0812032	86
86½	7·2147	·138606	·89338	·123828	0·8582177	$\bar{1}$·9510362	$\bar{1}$·0928189	86½
87	7·0449	·141948	·89589	·127170	0·8478718	$\bar{1}$·9522547	$\bar{1}$·1043847	87
87½	6·8794	·145362	·89833	·130584	0·8375494	$\bar{1}$·9534359	$\bar{1}$·1158900	87½
88	6·7181	·148851	·90072	·134073	0·8272489	$\bar{1}$·9545898	$\bar{1}$·1273413	88
88½	6·5611	·152414	·90304	·137636	0·8169744	$\bar{1}$·9557070	$\bar{1}$·1387321	88½
89	6·4081	·156052	·90530	·141274	0·8067296	$\bar{1}$·9567925	$\bar{1}$·1500622	89
89½	6·2592	·159766	·90750	·144988	0·7965164	$\bar{1}$·9578466	$\bar{1}$·1613320	89½
90	6·1142	·163555	·90964	·148777	0·7863362	$\bar{1}$·9588695	$\bar{1}$·1725358	90
90½	5·9730	·167420	·91173	·152642	0·7761921	$\bar{1}$·9598662	$\bar{1}$·1836741	90½
91	5·8356	·171362	·91376	·156584	0·7660858	$\bar{1}$·9608321	$\bar{1}$·1947474	91
91½	5·7019	·175379	·91574	·160601	0·7560217	$\bar{1}$·9617722	$\bar{1}$·2057482	91½
92	5·5718	·179474	·91766	·164696	0·7459988	$\bar{1}$·9626818	$\bar{1}$·2166830	92
92½	5·4453	·183645	·91953	·168867	0·7360199	$\bar{1}$·9635659	$\bar{1}$·2275448	92½
93	5·3222	·187893	·92135	·173115	0·7260899	$\bar{1}$·9644246	$\bar{1}$·2383347	93
93½	5·2025	·192216	·92312	·177438	0·7162099	$\bar{1}$·9652582	$\bar{1}$·2490466	93½
94	5·0861	·196616	·92484	·181838	0·7063816	$\bar{1}$·9660666	$\bar{1}$·2596846	94
94½	4·9728	·201092	·92651	·186314	0·6966053	$\bar{1}$·9668501	$\bar{1}$·2702455	94½
95	4·8627	·205646	·92814	·190868	0·6868798	$\bar{1}$·9676135	$\bar{1}$·2807331	95
95½	4·7556	·210276	·92972	·195498	0·6772094	$\bar{1}$·9683522	$\bar{1}$·2911423	95½
96	4·6515	·214983	·93126	·200205	0·6675957	$\bar{1}$·9690709	$\bar{1}$·3014750	96
96½	4·5503	·219766	·93275	·204988	0·6580389	$\bar{1}$·9697653	1·3117285	96½
97	4·4518	·224627	·93421	·209849	0·6485389	$\bar{1}$·9704445	$\bar{1}$·3219069	97
97½	4·3561	·229562	·93562	·214784	0·6390993	$\bar{1}$·9710995	$\bar{1}$·3320019	97½
98	4·2630	·234576	·93700	·219798	0·6297161	$\bar{1}$·9717396	$\bar{1}$·3420237	98
98½	4·1725	·239667	·93834	·224889	0·6203912	$\bar{1}$·9723602	$\bar{1}$·3519682	98½
99	4·0844	·244837	·93964	·230059	0·6111233	$\bar{1}$·9729615	$\bar{1}$·3618392	99
99½	3·9986	·250088	·94091	·235310	0·6019078	$\bar{1}$·9735481	$\bar{1}$·3716404	99½
100	3·9151	·255420	·94214	·240642	0·5927459	$\bar{1}$·9741154	$\bar{1}$·3813714	100
100½	3·8338	·260838	·94334	·246060	0·5836292	$\bar{1}$·9746683	1·3910410	100½
101	3·7545	·266348	·94452	·251570	0·5745498	1·9752112	$\bar{1}$·4006588	101
101½	3·6770	·271960	·94566	·257182	0·5654954	$\bar{1}$·9757350	$\bar{1}$·4102406	101½
102	3·6012	·277687	·94678	·262909	0·5564451	$\bar{1}$·9762491	$\bar{1}$·4198055	102
102½	3·5267	·283550	·94788	·268772	0·5473697	$\bar{1}$·9767534	$\bar{1}$·4293840	102½
103	3·4533	·289582	·94897	·274804	0·5382281	$\bar{1}$·9772525	$\bar{1}$·4390230	103
103½	3·3803	·295829	·95004	·281051	0·5289596	$\bar{1}$·9777419	$\bar{1}$·4487851	103½
104	3·3072	·302373	·95113	·287595	0·5194563	$\bar{1}$·9782399	$\bar{1}$·4587814	104
104½	3·2327	·309336	·95223	·294558	0·5095689	$\bar{1}$·9787419	1·4691708	104½
105	3·1555	·316905	·95337	·302127	0·4990704	$\bar{1}$·9792615	$\bar{1}$·4801896	105
105½	3·0734	·325374	·95458	·310596	0·4876168	$\bar{1}$·9798123	$\bar{1}$·4921959	105½
106	2·9832	·335208	·95591	·320430	0·4746862	$\bar{1}$·9804170	$\bar{1}$·5057332	106
106½	2·8791	·347325	·95745	·332547	0·4592642	$\bar{1}$·9811161	$\bar{1}$·5218531	106½
107	2·7538	·363129	·95930	·348351	0·4399388	$\bar{1}$·9819544	$\bar{1}$·5420171	107
107½	2·5939	·385523	·96167	·370745	0·4139497	$\bar{1}$·9830261	1·5690753	107½
108	2·3813	·419932	·96481	·405154	0·3768212	$\bar{1}$·9844418	$\bar{1}$·6076201	108
108½	2·0819	·480342	·96923	·465564	0·3184495	$\bar{1}$·9864268	$\bar{1}$·6679794	108½
109	1·6490	·606422	·97563	·591644	0·2172253	$\bar{1}$·9892851	$\bar{1}$·7720605	109
109½	1·0029	·997124	·98518	·982346	0·0012510	$\bar{1}$·9935156	$\bar{1}$·9922644	109½

NOTE.

In the Half-yearly Life Table the Interest is convertible half-yearly, and the v at 3 per Cent. is derived thus :—

$$\text{Interest 3 per Cent.}\,;\ \lambda v = \lambda \frac{1}{1+\frac{\cdot 03}{2}} \text{ or } \lambda \frac{1}{1\cdot 015} = 9\cdot 9935339{,}57750768\,;\ v = \cdot 98522167$$

and

$$1 - v = d = \cdot 01477833\,;\ \lambda d = \bar{2}\cdot 1696253$$

$$\text{or } \lambda d = \lambda \frac{3}{203} = \bar{2}\cdot 1696253$$

SINGLE LIVES.

QUARTERLY TABLE.

MALES and FEMALES.

(For Note as to Interest see page 174.)

QUARTERLY TABLE:—MALES.

Logarithms of the Series l_x.

MALES.							
Age (x) Quarter Years.	λ l_x	Age (x) Quarter Years.	λ l_x	Age (x) Quarter Years.	λ l_x	Age (x) Quarter Years.	λ l_x
0	5·7090538	55	5·5395527	110	5·4942590	165	5·4275703
1	5·6707648	56	5·5390375	111	5·4932194	166	5·4261127
2	5·6557125	57	5·5385182	112	5·4921749	167	5·4246429
3	5·6425635	58	5·5379938	113	5·4911254	168	5·4231610
4	5·6314702	59	5·5374628	114	5·4900709	169	5·4216665
5	5·6225851	60	5·5369242	115	5·4890113	170	5·4201592
6	5·6148959	61	5·5363770	116	5·4879467	171	5·4186390
7	5·6082782	62	5·5358199	117	5·4868769	172	5·4171056
8	5·6026079	63	5·5352521	118	5·4858018	173	5·4155588
9	5·5977605	64	5·5346726	119	5·4847215	174	5·4139983
10	5·5936119	65	5·5340805	120	5·4836359	175	5·4124239
11	5·5900375	66	5·5334750	121	5·4825448	176	5·4108353
12	5·5869132	67	5·5328552	122	5·4814483	177	5·4092323
13	5·5839915	68	5·5322204	123	5·4803462	178	5·4076146
14	5·5812806	69	5·5315700	124	5·4792385	179	5·4059820
15	5·5787651	70	5·5309032	125	5·4781251	180	5·4043342
16	5·5764301	71	5·5302196	126	5·4770058	181	5·4026710
17	5·5742615	72	5·5295186	127	5·4758807	182	5·4009920
18	5·5722457	73	5·5287996	128	5·4747496	183	5·3992970
19	5·5703698	74	5·5280623	129	5·4736124	184	5·3975858
20	5·5686214	75	5·5273064	130	5·4724691	185	5·3958581
21	5·5669889	76	5·5265313	131	5·4713195	186	5·3941135
22	5·5654611	77	5·5257370	132	5·4701635	187	5·3923518
23	5·5640277	78	5·5249231	133	5·4690011	188	5·3905727
24	5·5626788	79	5·5240895	134	5·4678320	189	5·3887760
25	5·5614052	80	5·5232361	135	5·4666563	190	5·3869613
26	5·5601984	81	5·5223407	136	5·4654737	191	5·3851283
27	5·5590504	82	5·5214401	137	5·4642842	192	5·3832768
28	5·5579538	83	5·5205343	138	5·4630876	193	5·3814063
29	5·5568835	84	5·5196235	139	5·4618839	194	5·3795168
30	5·5558625	85	5·5187077	140	5·4606728	195	5·3776077
31	5·5548883	86	5·5177869	141	5·4594543	196	5·3756788
32	5·5539582	87	5·5168612	142	5·4582282	197	5·3737298
33	5·5530698	88	5·5159306	143	5·4569943	198	5·3717604
34	5·5522205	89	5·5149951	144	5·4557526	199	5·3697702
35	5·5514078	90	5·5140548	145	5·4545029	200	5·3677590
36	5·5506295	91	5·5131097	146	5·4532449	201	5·3657263
37	5·5498831	92	5·5121599	147	5·4519787	202	5·3636720
38	5·5491663	93	5·5112053	148	5·4507040	203	5·3615955
39	5·5484770	94	5·5102460	149	5·4494207	204	5·3594966
40	5·5478129	95	5·5092820	150	5·4481285	205	5·3573200
41	5·5471719	96	5·5083133	151	5·4468274	206	5·3551160
42	5·5465519	97	5·5073399	152	5·4455172	207	5·3528846
43	5·5459510	98	5·5063619	153	5·4441977	208	5·3506255
44	5·5453670	99	5·5053792	154	5·4428687	209	5·3483387
45	5·5447982	100	5·5043918	155	5·4415300	210	5·3460240
46	5·5442425	101	5·5033997	156	5·4401815	211	5·3436810
47	5·5436983	102	5·5024030	157	5·4388229	212	5·3413096
48	5·5431636	103	5·5014016	158	5·4374542	213	5·3389093
49	5·5426369	104	5·5003955	159	5·4360750	214	5·3364798
50	5·5421164	105	5·4993847	160	5·4346852	215	5·3340208
51	5·5416006	106	5·4983691	161	5·4332847	216	5·3315316
52	5·5410877	107	5·4973488	162	5·4318731	217	5·3290120
53	5·5405765	108	5·4963237	163	5·4304503	218	5·3264613
54	5·5400653	109	5·4952938	164	5·4290161	219	5·3238790

QUARTERLY TABLE :—MALES.

Logarithms of the Series l_x.

MALES.

Age (x) Quarter Years.	$\lambda\, l_x$	Age (x) Quarter Years.	$\lambda\, l_x$	Age (x) Quarter Years.	$\lambda\, l_x$	Age (x) Quarter Years.	$\lambda\, l_x$
220	5·3212644	275	5·0928654	330	4·4381912	385	2·6920698
221	5·3186169	276	5·0862279	331	4·4187646	386	2·6443431
222	5·3159359	277	5·0794568	332	4·3989822	387	2·5959165
223	5·3132205	278	5·0725491	333	4·3788389	388	2·5467827
224	5·3104701	279	5·0655018	334	4·3583295	389	2·4969340
225	5·3076837	280	5·0583119	335	4·3374486	390	2·4463632
226	5·3048607	281	5·0509763	336	4·3161911	391	2·3950627
227	5·3019999	282	5·0434919	337	4·2945515	392	2·3430250
228	5·2991007	283	5·0358555	338	4·2725246	393	2·2902424
229	5·2961618	284	5·0280639	339	4·2501048	394	2·2367073
230	5·2931825	285	5·0201140	340	4·2272868	395	2·1824121
231	5·2901615	286	5·0120024	341	4·2040651	396	2·1273491
232	5·2870978	287	5·0037258	342	4·1804342	397	2·0715105
233	5·2839903	288	4·9952810	343	4·1563883	398	2·0148885
234	5·2808378	289	4·9866044	344	4·1319221	399	1·9574753
235	5·2776390	290	4·9778727	345	4·1070297	400	1·8992629
236	5·2743928	291	4·9689023	346	4·0817056	401	1·8402436
237	5·2710978	292	4·9597198	347	4·0559139	402	1·7804094
238	5·2677527	293	4·9504116	348	4·0297389	403	1·7197522
239	5·2643561	294	4·9408842	349	4·0030848	404	1·6582640
240	5·2609066	295	4·9311638	350	3·9759758	405	1·5959368
241	5·2574028	296	4·9212468	351	3·9484059	406	1·5327625
242	5·2538431	297	4·9111296	352	3·9203691	407	1·4687328
243	5·2502260	298	4·9008082	353	3·8918597	408	1·4038396
244	5·2465499	299	4·8902790	354	3·8628714	409	1·3380747
245	5·2428133	300	4·8795381	355	3·8333983	410	1·2714298
246	5·2390144	301	4·8685817	356	3·8034343	411	1·2038966
247	5·2351515	302	4·8574057	357	3·7729732	412	1·1354666
248	5·2312230	303	4·8460063	358	3·7420088	413	1·0661317
249	5·2272270	304	4·8343794	359	3·7105350	414	0·9958831
250	5·2231618	305	4·8225211	360	3·6785455	415	0·9247126
251	5·2190254	306	4·8104272	361	3·6460339	416	0·8526117
252	5·2148159	307	4·7980936	362	3·6129940	417	0·7795716
253	5·2105315	308	4·7855161	363	3·5794194	418	0·7055839
254	5·2061701	309	4·7726906	364	3·5453036	419	0·6306399
255	5·2017297	310	4·7596129	365	3·5106402	420	0·5547309
256	5·1972083	311	4·7462785	366	3·4754227	421	0·4778482
257	5·1926037	312	4·7326833	367	3·4396445	422	0·3999831
258	5·1879139	313	4·7188229	368	3·4032991	423	0·3211268
259	5·1831365	314	4·7046928	369	3·3663798	424	0·2412703
260	5·1782695	315	4·6902886	370	3·3288801	425	0·1604049
261	5·1733105	316	4·6756058	371	3·2907931	426	0·0785217
262	5·1682573	317	4·6606400	372	3·2521122	427	9·9956115
263	5·1631074	318	4·6453864	373	3·2128305	428	9·9116655
264	5·1578586	319	4·6298407	374	3·1729413	429	9·8266747
265	5·1525083	320	4·6139980	375	3·1324377	430	9·7406299
266	5·1470541	321	4·5978537	376	3·0913127	431	9·6535220
267	5·1414936	322	4·5814032	377	3·0495595	432	9·5653418
268	5·1358241	323	4·5646415	378	3·0071710	433	9·4760802
269	5·1300431	324	4·5475640	379	2·9641403	434	9·3857279
270	5·1241480	325	4·5301657	380	2·9204602	435	9·2942756
271	5·1181360	326	4·5124419	381	2·8761237	436	9·2017141
272	5·1120046	327	4·4913875	382	2·8311236		
273	5·1057508	328	4·4759976	383	2·7854528		
274	5·0993720	329	4·4572672	384	2·7391039		

QUARTERLY TABLE:—FEMALES.

Logarithms of the Series l_x.

FEMALES.

Age (x) Quarter Years.	$\lambda\, l_x$	Age (x) Quarter Years.	$\lambda\, l_x$	Age (x) Quarter Years.	$\lambda\, l_x$	Age (x) Quarter Years.	$\lambda\, l_x$
0	5·6886465	55	5·5346609	110	5·4871177	165	5·4187217
1	5·6585491	56	5·5341051	111	5·4860242	166	5·4173008
2	5·6462495	57	5·5335451	112	5·4849253	167	5·4158722
3	5·6355335	58	5·5329796	113	5·4838213	168	5·4144359
4	5·6258069	59	5·5324074	114	5·4827120	169	5·4129917
5	5·6164755	60	5·5318275	115	5·4815976	170	5·4115397
6	5·6089777	61	5·5312390	116	5·4804778	171	5·4100796
7	5·6029548	62	5·5306407	117	5·4793529	172	5·4086114
8	5·5980479	63	5·5300318	118	5·4782227	173	5·4071350
9	5·5938981	64	5·5294114	119	5·4770873	174	5·4056502
10	5·5901467	65	5·5287787	120	5·4759466	175	5·4041570
11	5·5864347	66	5·5281328	121	5·4748007	176	5·4026553
12	5·5824033	67	5·5274730	122	5·4736495	177	5·4011449
13	5·5794173	68	5·5267986	123	5·4724931	178	5·3996257
14	5·5766624	69	5·5261091	124	5·4713313	179	5·3980976
15	5·5741205	70	5·5254037	125	5·4701643	180	5·3965606
16	5·5717743	71	5·5246820	126	5·4689919	181	5·3950144
17	5·5696072	72	5·5239434	127	5·4678142	182	5·3934590
18	5·5676035	73	5·5231875	128	5·4666311	183	5·3918942
19	5·5657480	74	5·5224139	129	5·4654426	184	5·3903199
20	5·5640266	75	5·5216222	130	5·4642487	185	5·3887360
21	5·5624256	76	5·5208121	131	5·4630494	186	5·3871423
22	5·5609324	77	5·5199834	132	5·4618446	187	5·3855388
23	5·5595348	78	5·5191358	133	5·4606343	188	5·3839253
24	5·5582216	79	5·5182691	134	5·4594185	189	5·3823016
25	5·5569824	80	5·5173833	135	5·4581971	190	5·3806677
26	5·5558073	81	5·5164588	136	5·4569701	191	5·3790234
27	5·5546874	82	5·5155281	137	5·4557375	192	5·3773685
28	5·5536144	83	5·5145911	138	5·4544991	193	5·3757029
29	5·5525587	84	5·5136479	139	5·4532551	194	5·3740265
30	5·5515483	85	5·5126987	140	5·4520053	195	5·3723391
31	5·5505807	86	5·5117434	141	5·4507497	196	5·3706406
32	5·5496536	87	5·5107822	142	5·4494882	197	5·3689309
33	5·5487646	88	5·5098150	143	5·4482208	198	5·3672097
34	5·5479114	89	5·5088420	144	5·4469475	199	5·3654770
35	5·5470916	90	5·5078631	145	5·4456681	200	5·3637325
36	5·5463032	91	5·5068784	146	5·4443827	201	5·3619761
37	5·5455438	92	5·5058879	147	5·4430912	202	5·3602078
38	5·5448114	93	5·5048918	148	5·4417935	203	5·3584272
39	5·5441039	94	5·5038900	149	5·4404895	204	5·3566343
40	5·5434193	95	5·5028826	150	5·4391793	205	5·3548289
41	5·5427556	96	5·5018696	151	5·4378626	206	5·3530107
42	5·5421108	97	5·5008511	152	5·4365396	207	5·3511798
43	5·5414831	98	5·4998270	153	5·4352100	208	5·3493358
44	5·5408707	99	5·4987975	154	5·4338739	209	5·3474787
45	5·5402717	100	5·4977625	155	5·4325312	210	5·3456081
46	5·5396843	101	5·4967220	156	5·4311817	211	5·3437241
47	5·5391070	102	5·4956762	157	5·4298255	212	5·3418264
48	5·5385381	103	5·4946250	158	5·4284624	213	5·3399148
49	5·5379759	104	5·4935685	159	5·4270923	214	5·3379891
50	5·5374188	105	5·4925066	160	5·4257153	215	5·3360492
51	5·5368655	106	5·4914394	161	5·4243311	216	5·3340948
52	5·5363145	107	5·4903669	162	5·4229398	217	5·3319910
53	5·5357642	108	5·4892891	163	5·4215411	218	5·3298518
54	5·5352135	109	5·4882060	164	5·4201352	219	5·3276770

QUARTERLY TABLE:—Females.

Logarithms of the Series l_x.

FEMALES.

Age (x) Quarter Years.	$\lambda\ l_x$	Age (x) Quarter Years.	$\lambda\ l_x$	Age (x) Quarter Years.	$\lambda\ l_x$	Age (x) Quarter Years.	$\lambda\ l_x$
220	5·3254663	275	5·1230157	330	4·5297999	385	2·9060033
221	5·3232195	276	5·1170690	331	4·5120108	386	2·8611191
222	5·3209361	277	5·1110013	332	4·4938867	387	2·8155568
223	5·3186158	278	5·1048097	333	4·4754226	388	2·7693090
224	5·3162583	279	5·0984916	334	4·4566133	389	2·7223681
225	5·3138629	280	5·0920439	335	4·4374536	390	2·6747268
226	5·3114292	281	5·0854640	336	4·4179384	391	2·6263773
227	5·3089567	282	5·0787489	337	4·3980624	392	2·5773122
228	5·3064447	283	5·0718956	338	4·3778202	393	2·5275237
229	5·3038926	284	5·0649012	339	4·3572066	394	2·4770042
230	5·3012997	285	5·0577627	340	4·3362162	395	2·4257459
231	5·2986653	286	5·0504768	341	4·3148435	396	2·3737411
232	5·2959886	287	5·0430406	342	4·2930831	397	2·3209819
233	5·2932689	288	5·0354509	343	4·2709294	398	2·2674604
234	5·2905052	289	5·0277044	344	4·2483770	399	2·2131689
235	5·2876966	290	5·0197980	345	4·2254201	400	2·1580992
236	5·2848423	291	5·0117282	346	4·2020532	401	2·1022435
237	5·2819412	292	5·0034919	347	4·1782706	402	2·0455937
238	5·2789924	293	4·9950856	348	4·1540665	403	1·9881417
239	5·2759947	294	4·9865059	349	4·1294352	404	1·9298794
240	5·2729470	295	4·9777493	350	4·1043709	405	1·8707986
241	5·2698482	296	4·9688124	351	4·0788677	406	1·8108911
242	5·2666970	297	4·9596915	352	4·0529197	407	1·7501488
243	5·2634924	298	4·9503832	353	4·0265210	408	1·6885632
244	5·2602329	299	4·9408837	354	3·9996656	409	1·6261261
245	5·2569172	300	4·9311894	355	3·9723475	410	1·5628290
246	5·2535440	301	4·9212966	356	3·9445605	411	1·4986637
247	5·2501119	302	4·9112015	357	3·9162987	412	1·4336215
248	5·2466194	303	4·9009003	358	3·8875558	413	1·3676941
249	5·2430650	304	4·8903891	359	3·8583257	414	1·3008728
250	5·2394471	305	4·8796642	360	3·8286021	415	1·2331491
251	5·2357643	306	4·8687215	361	3·7983787	416	1·1645143
252	5·2320148	307	4·8575571	362	3·7676492	417	1·0949598
253	5·2281971	308	4·8461669	363	3·7364072	418	1·0244768
254	5·2243094	309	4·8345469	364	3·7046464	419	0·9530566
255	5·2203499	310	4·8226930	365	3·6723602	420	0·8806904
256	5·2163168	311	4·8106011	366	3·6395423	421	0·8073693
257	5·2122084	312	4·7982669	367	3·6061859	422	0·7330845
258	5·2080227	313	4·7856863	368	3·5722846	423	0·6578269
259	5·2037578	314	4·7728549	369	3·5378318	424	0·5815878
260	5·1994117	315	4·7597685	370	3·5028207	425	0·5043579
261	5·1949825	316	4·7464227	371	3·4672447	426	0·4261283
262	5·1904681	317	4·7328130	372	3·4310970	427	0·3468899
263	5·1858664	318	4·7189351	373	3·3943708	428	0·2666335
264	5·1811753	319	4·7047844	374	3·3570593	429	0·1853500
265	5·1763925	320	4·6903565	375	3·3191556	430	0·1030300
266	5·1715159	321	4·6756467	376	3·2806527	431	0·0196644
267	5·1665431	322	4·6606504	377	3·2415438	432	9·9352438
268	5·1614720	323	4·6453631	378	3·2018218	433	9·8497588
269	5·1563001	324	4·6297799	379	3·1614796	434	9·7632001
270	5·1510250	325	4·6138961	380	3·1205102	435	9·6755582
271	5·1456444	326	4·5977070	381	3·0789064	436	9·5868236
272	5·1401557	327	4·5812078	382	3·0366611		
273	5·1345564	328	4·5643934	383	2·9937670		
274	5·1288439	329	4·5472591	384	2·9502168		

QUARTERLY TABLE:—MALES. Interest 3 per Cent.

Logarithms of the Series $p_x = \lambda$ probability of living *a quarter of a year* after Age x.

Age (x)	$\lambda\, p_x$	Age (x)	$\lambda\, p_x$	Age (x)	$\lambda\, p_x$	Age (x)	$\lambda\, p_x$
0	$\bar{1}$·9617110	14	$\bar{1}$·9994807	28	$\bar{1}$·9989505	42	$\bar{1}$·9985055
0¼	$\bar{1}$·9849477	14¼	$\bar{1}$·9994756	28¼	$\bar{1}$·9989455	42¼	$\bar{1}$·9984927
0½	$\bar{1}$·9868510	14½	$\bar{1}$·9994690	28½	$\bar{1}$·9989404	42½	$\bar{1}$·9984798
0¾	$\bar{1}$·9889067	14¾	$\bar{1}$·9994614	28¾	$\bar{1}$·9989354	42¾	$\bar{1}$·9984666
1	$\bar{1}$·9911149	15	$\bar{1}$·9994528	29	$\bar{1}$·9989302	43	$\bar{1}$·9984532
1¼	$\bar{1}$·9923108	15¼	$\bar{1}$·9994429	29¼	$\bar{1}$·9989249	43¼	$\bar{1}$·9984395
1½	$\bar{1}$·9933823	15½	$\bar{1}$·9994322	29½	$\bar{1}$·9989197	43½	$\bar{1}$·9984256
1¾	$\bar{1}$·9943297	15¾	$\bar{1}$·9994205	29¾	$\bar{1}$·9989144	43¾	$\bar{1}$·9984114
2	$\bar{1}$·9951526	16	$\bar{1}$·9994079	30	$\bar{1}$·9989089	44	$\bar{1}$·9983970
2¼	$\bar{1}$·9958514	16¼	$\bar{1}$·9993945	30¼	$\bar{1}$·9989035	44¼	$\bar{1}$·9983823
2½	$\bar{1}$·9964256	16½	$\bar{1}$·9993802	30½	$\bar{1}$·9988979	44½	$\bar{1}$·9983674
2¾	$\bar{1}$·9968757	16¾	$\bar{1}$·9993652	30¾	$\bar{1}$·9988923	44¾	$\bar{1}$·9983522
3	$\bar{1}$·9970783	17	$\bar{1}$·9993496	31	$\bar{1}$·9988866	45	$\bar{1}$·9983368
3¼	$\bar{1}$·9972891	17¼	$\bar{1}$·9993332	31¼	$\bar{1}$·9988807	45¼	$\bar{1}$·9983210
3½	$\bar{1}$·9974845	17½	$\bar{1}$·9993164	31½	$\bar{1}$·9988749	45½	$\bar{1}$·9983050
3¾	$\bar{1}$·9976650	17¾	$\bar{1}$·9992990	31¾	$\bar{1}$·9988689	45¾	$\bar{1}$·9982888
4	$\bar{1}$·9978314	18	$\bar{1}$·9992810	32	$\bar{1}$·9988628	46	$\bar{1}$·9982723
4¼	$\bar{1}$·9979842	18¼	$\bar{1}$·9992627	32¼	$\bar{1}$·9988567	46¼	$\bar{1}$·9982554
4½	$\bar{1}$·9981241	18½	$\bar{1}$·9992441	32½	$\bar{1}$·9988504	46½	$\bar{1}$·9982383
4¾	$\bar{1}$·9982516	18¾	$\bar{1}$·9992249	32¾	$\bar{1}$·9988440	46¾	$\bar{1}$·9982209
5	$\bar{1}$·9983675	19	$\bar{1}$·9992057	33	$\bar{1}$·9988376	47	$\bar{1}$·9982033
5¼	$\bar{1}$·9984722	19¼	$\bar{1}$·9991861	33¼	$\bar{1}$·9988309	47¼	$\bar{1}$·9981853
5½	$\bar{1}$·9985666	19½	$\bar{1}$·9991664	33½	$\bar{1}$·9988243	47½	$\bar{1}$·9981670
5¾	$\bar{1}$·9986511	19¾	$\bar{1}$·9991466	33¾	$\bar{1}$·9988174	47¾	$\bar{1}$·9981485
6	$\bar{1}$·9987264	20	$\bar{1}$·9991046	34	$\bar{1}$·9988105	48	$\bar{1}$·9981295
6¼	$\bar{1}$·9987932	20¼	$\bar{1}$·9990994	34¼	$\bar{1}$·9988034	48¼	$\bar{1}$·9981105
6½	$\bar{1}$·9988520	20½	$\bar{1}$·9990942	34½	$\bar{1}$·9987963	48½	$\bar{1}$·9980909
6¾	$\bar{1}$·9989034	20¾	$\bar{1}$·9990892	34¾	$\bar{1}$·9987889	48¾	$\bar{1}$·9980711
7	$\bar{1}$·9989297	21	$\bar{1}$·9990842	35	$\bar{1}$·9987815	49	$\bar{1}$·9980510
7¼	$\bar{1}$·9989790	21¼	$\bar{1}$·9990792	35¼	$\bar{1}$·9987739	49¼	$\bar{1}$·9980306
7½	$\bar{1}$·9990258	21½	$\bar{1}$·9990743	35½	$\bar{1}$·9987661	49½	$\bar{1}$·9980098
7¾	$\bar{1}$·9990699	21¾	$\bar{1}$·9990694	35¾	$\bar{1}$·9987583	49¾	$\bar{1}$·9979888
8	$\bar{1}$·9991116	22	$\bar{1}$·9990645	36	$\bar{1}$·9987503	50	$\bar{1}$·9979673
8¼	$\bar{1}$·9991507	22¼	$\bar{1}$·9990597	36¼	$\bar{1}$·9987420	50¼	$\bar{1}$·9979457
8½	$\bar{1}$·9991873	22½	$\bar{1}$·9990549	36½	$\bar{1}$·9987338	50½	$\bar{1}$·9979235
8¾	$\bar{1}$·9992217	22¾	$\bar{1}$·9990502	36¾	$\bar{1}$·9987253	50¾	$\bar{1}$·9979011
9	$\bar{1}$·9992536	23	$\bar{1}$·9990454	37	$\bar{1}$·9987167	51	$\bar{1}$·9978234
9¼	$\bar{1}$·9992832	23¼	$\bar{1}$·9990407	37¼	$\bar{1}$·9987078	51¼	$\bar{1}$·9977960
9½	$\bar{1}$·9993107	23½	$\bar{1}$·9990360	37½	$\bar{1}$·9986989	51½	$\bar{1}$·9977686
9¾	$\bar{1}$·9993359	23¾	$\bar{1}$·9990313	37¾	$\bar{1}$·9986898	51¾	$\bar{1}$·9977409
10	$\bar{1}$·9993590	24	$\bar{1}$·9990266	38	$\bar{1}$·9986805	52	$\bar{1}$·9977132
10¼	$\bar{1}$·9993800	24¼	$\bar{1}$·9990220	38¼	$\bar{1}$·9986710	52¼	$\bar{1}$·9976853
10½	$\bar{1}$·9993991	24½	$\bar{1}$·9990173	38½	$\bar{1}$·9986613	52½	$\bar{1}$·9976570
10¾	$\bar{1}$·9994160	24¾	$\bar{1}$·9990126	38¾	$\bar{1}$·9986515	52¾	$\bar{1}$·9976286
11	$\bar{1}$·9994312	25	$\bar{1}$·9990079	39	$\bar{1}$·9986414	53	$\bar{1}$·9975997
11¼	$\bar{1}$·9994443	25¼	$\bar{1}$·9990033	39¼	$\bar{1}$·9986313	53¼	$\bar{1}$·9975705
11½	$\bar{1}$·9994558	25½	$\bar{1}$·9989986	39½	$\bar{1}$·9986208	53½	$\bar{1}$·9975410
11¾	$\bar{1}$·9994653	25¾	$\bar{1}$·9989939	39¾	$\bar{1}$·9986102	53¾	$\bar{1}$·9975108
12	$\bar{1}$·9994733	26	$\bar{1}$·9989892	40	$\bar{1}$·9985995	54	$\bar{1}$·9974804
12¼	$\bar{1}$·9994795	26¼	$\bar{1}$·9989844	40¼	$\bar{1}$·9985884	54¼	$\bar{1}$·9974493
12½	$\bar{1}$·9994842	26½	$\bar{1}$·9989797	40½	$\bar{1}$·9985772	54½	$\bar{1}$·9974177
12¾	$\bar{1}$·9994871	26¾	$\bar{1}$·9989749	40¾	$\bar{1}$·9985658	54¾	$\bar{1}$·9973854
13	$\bar{1}$·9994888	27	$\bar{1}$·9989701	41	$\bar{1}$·9985542	55	$\bar{1}$·9973525
13¼	$\bar{1}$·9994888	27¼	$\bar{1}$·9989652	41¼	$\bar{1}$·9985424	55¼	$\bar{1}$·9973190
13½	$\bar{1}$·9994874	27½	$\bar{1}$·9989604	41½	$\bar{1}$·9985302	55½	$\bar{1}$·9972846
13¾	$\bar{1}$·9994848	27¾	$\bar{1}$·9989555	41¾	$\bar{1}$·9985181	55¾	$\bar{1}$·9972496

Note.—$\lambda\, p_x = \lambda\, l_{x+\frac{1}{4}} - \lambda\, l_x$.

QUARTERLY TABLE:—MALES. Interest 3 per Cent.

Logarithms of the Series $p_x = \lambda$ probability of living *a quarter of a year* after Age x.

Age (x)	$\lambda\, p_x$	**Age** (x)	$\lambda\, p_x$	**Age** (x)	$\lambda\, p_x$	**Age** (x)	$\lambda\, p_x$
56	$\bar{1}$·9972136	70	$\bar{1}$·9926644	84	$\bar{1}$·9783604	98	$\bar{1}$·9472174
56¼	$\bar{1}$·9971770	70¼	$\bar{1}$·9925156	84¼	$\bar{1}$·9779731	98¼	$\bar{1}$·9464649
56½	$\bar{1}$·9971392	70½	$\bar{1}$·9923636	84½	$\bar{1}$·9775802	98½	$\bar{1}$·9457048
56¾	$\bar{1}$·9971008	70¾	$\bar{1}$·9922084	84¾	$\bar{1}$·9771820	98¾	$\bar{1}$·9449370
57	$\bar{1}$·9970611	71	$\bar{1}$·9920501	85	$\bar{1}$·9767783	99	$\bar{1}$·9441614
57¼	$\bar{1}$·9970207	71¼	$\bar{1}$·9918884	85¼	$\bar{1}$·9763691	99¼	$\bar{1}$·9433780
57½	$\bar{1}$·9969790	71½	$\bar{1}$·9917234	85½	$\bar{1}$·9759541	99½	$\bar{1}$·9425868
57¾	$\bar{1}$·9969363	71¾	$\bar{1}$·9915552	85¾	$\bar{1}$·9755338	99¾	$\bar{1}$·9417876
58	$\bar{1}$·9968925	72	$\bar{1}$·9913834	86	$\bar{1}$·9751076	100	$\bar{1}$·9409807
58¼	$\bar{1}$·9968475	72¼	$\bar{1}$·9912083	86¼	$\bar{1}$·9746759	100¼	$\bar{1}$·9401658
58½	$\bar{1}$·9968012	72½	$\bar{1}$·9910296	86½	$\bar{1}$·9742383	100½	$\bar{1}$·9393428
58¾	$\bar{1}$·9967538	72¾	$\bar{1}$·9908475	86¾	$\bar{1}$·9737950	100¾	$\bar{1}$·9385118
59	$\bar{1}$·9967050	73	$\bar{1}$·9906618	87	$\bar{1}$·9733459	101	$\bar{1}$·9376728
59¼	$\bar{1}$·9966549	73¼	$\bar{1}$·9904726	87¼	$\bar{1}$·9728910	101¼	$\bar{1}$·9368257
59½	$\bar{1}$·9966034	73½	$\bar{1}$·9902796	87½	$\bar{1}$·9724301	101½	$\bar{1}$·9359703
59¾	$\bar{1}$·9965505	73¾	$\bar{1}$·9900830	87¾	$\bar{1}$·9719632	101¾	$\bar{1}$·9351068
60	$\bar{1}$·9964962	74	$\bar{1}$·9898828	88	$\bar{1}$·9714906	102	$\bar{1}$·9342351
60¼	$\bar{1}$·9964403	74¼	$\bar{1}$·9896786	88¼	$\bar{1}$·9710117	102¼	$\bar{1}$·9333551
60½	$\bar{1}$·9963829	74½	$\bar{1}$·9894708	88½	$\bar{1}$·9705269	102½	$\bar{1}$·9324668
60¾	$\bar{1}$·9963239	74¾	$\bar{1}$·9892591	88¾	$\bar{1}$·9700360	102¾	$\bar{1}$·9315700
61	$\bar{1}$·9962634	75	$\bar{1}$·9890436	89	$\bar{1}$·9695389	103	$\bar{1}$·9306651
61¼	$\bar{1}$·9962011	75¼	$\bar{1}$·9888240	89¼	$\bar{1}$·9690356	103¼	$\bar{1}$·9297514
61½	$\bar{1}$·9961371	75½	$\bar{1}$·9886006	89½	$\bar{1}$·9685262	103½	$\bar{1}$·9288295
61¾	$\bar{1}$·9960715	75¾	$\bar{1}$·9883731	89¾	$\bar{1}$·9680105	103¾	$\bar{1}$·9278991
62	$\bar{1}$·9960040	76	$\bar{1}$·9881417	90	$\bar{1}$·9674884	104	$\bar{1}$·9269599
62¼	$\bar{1}$·9959348	76¼	$\bar{1}$·9879061	90¼	$\bar{1}$·9669601	104¼	$\bar{1}$·9260123
62½	$\bar{1}$·9958636	76½	$\bar{1}$·9876664	90½	$\bar{1}$·9664254	104½	$\bar{1}$·9250560
62¾	$\bar{1}$·9957905	76¾	$\bar{1}$·9874225	90¾	$\bar{1}$·9658842	104¾	$\bar{1}$·9240910
63	$\bar{1}$·9957156	77	$\bar{1}$·9871745	91	$\bar{1}$·9653366	105	$\bar{1}$·9231173
63¼	$\bar{1}$·9956386	77¼	$\bar{1}$·9869223	91¼	$\bar{1}$·9647825	105¼	$\bar{1}$·9221349
63½	$\bar{1}$·9955596	77½	$\bar{1}$·9866656	91½	$\bar{1}$·9642218	105½	$\bar{1}$·9211437
63¾	$\bar{1}$·9954786	77¾	$\bar{1}$·9864048	91¾	$\bar{1}$·9636546	105¾	$\bar{1}$·9201435
64	$\bar{1}$·9953954	78	$\bar{1}$·9861396	92	$\bar{1}$·9630807	106	$\bar{1}$·9191346
64¼	$\bar{1}$·9953102	78¼	$\bar{1}$·9858699	92¼	$\bar{1}$·9625003	106¼	$\bar{1}$·9181168
64½	$\bar{1}$·9952226	78½	$\bar{1}$·9855958	92½	$\bar{1}$·9619130	106½	$\bar{1}$·9170898
64¾	$\bar{1}$·9951330	78¾	$\bar{1}$·9853172	92¾	$\bar{1}$·9613191	106¾	$\bar{1}$·9160540
65	$\bar{1}$·9950410	79	$\bar{1}$·9850342	93	$\bar{1}$·9607183	107	$\bar{1}$·9150092
65¼	$\bar{1}$·9949468	79¼	$\bar{1}$·9847464	93¼	$\bar{1}$·9601108	107¼	$\bar{1}$·9139552
65½	$\bar{1}$·9948501	79½	$\bar{1}$·9844543	93½	$\bar{1}$·9594964	107½	$\bar{1}$·9128921
65¾	$\bar{1}$·9947512	79¾	$\bar{1}$·9841573	93¾	$\bar{1}$·9588750	107¾	$\bar{1}$·9118198
66	$\bar{1}$·9946497	80	$\bar{1}$·9838557	94	$\bar{1}$·9582468	108	$\bar{1}$·9107384
66¼	$\bar{1}$·9945458	80¼	$\bar{1}$·9835495	94¼	$\bar{1}$·9576115	108¼	$\bar{1}$·9096477
66½	$\bar{1}$·9944395	80½	$\bar{1}$·9832383	94½	$\bar{1}$·9569693	108½	$\bar{1}$·9085477
66¾	$\bar{1}$·9943305	80¾	$\bar{1}$·9829225	94¾	$\bar{1}$·9563199	108¾	$\bar{1}$·9074385
67	$\bar{1}$·9942190	81	$\bar{1}$·9826017	95	$\bar{1}$·9556635		
67¼	$\bar{1}$·9941049	81¼	$\bar{1}$·9822762	95¼	$\bar{1}$·9549999		
67½	$\bar{1}$·9939880	81½	$\bar{1}$·9819456	95½	$\bar{1}$·9543292		
67¾	$\bar{1}$·9938686	81¾	$\bar{1}$·9816101	95¾	$\bar{1}$·9536511		
68	$\bar{1}$·9937462	82	$\bar{1}$·9812696	96	$\bar{1}$·9529659		
68¼	$\bar{1}$·9936212	82¼	$\bar{1}$·9809240	96¼	$\bar{1}$·9522733		
68½	$\bar{1}$·9934934	82½	$\bar{1}$·9805734	96½	$\bar{1}$·9515734		
68¾	$\bar{1}$·9933625	82¾	$\bar{1}$·9802176	96¾	$\bar{1}$·9508662		
69	$\bar{1}$·9932289	83	$\bar{1}$·9798567	97	$\bar{1}$·9501513		
69¼	$\bar{1}$·9930923	83¼	$\bar{1}$·9794906	97¼	$\bar{1}$·9494292		
69½	$\bar{1}$·9929527	83½	$\bar{1}$·9791191	97½	$\bar{1}$·9486995		
69¾	$\bar{1}$·9928101	83¾	$\bar{1}$·9787425	97¾	$\bar{1}$·9479623		

QUARTERLY TABLE:—FEMALES. Interest 3 per Cent.

Logarithms of the Series $p_x = \lambda$ probability of living *a quarter of a year* after Age x.

Age (x)	$\lambda\, p_x$	**Age** (x)	$\lambda\, p_x$	**Age** (x)	$\lambda\, p_x$	**Age** (x)	$\lambda\, p_x$
0	$\bar{1}$·9699026	14	$\bar{1}$·9994400	28	$\bar{1}$·9988960	42	$\bar{1}$·9985558
$0\frac{1}{4}$	$\bar{1}$·9877004	$14\frac{1}{4}$	$\bar{1}$·9994345	$28\frac{1}{4}$	$\bar{1}$·9988907	$42\frac{1}{4}$	$\bar{1}$·9985480
$0\frac{1}{2}$	$\bar{1}$·9892840	$14\frac{1}{2}$	$\bar{1}$·9994278	$28\frac{1}{2}$	$\bar{1}$·9988856	$42\frac{1}{2}$	$\bar{1}$·9985399
$0\frac{3}{4}$	$\bar{1}$·9902734	$14\frac{3}{4}$	$\bar{1}$·9994201	$28\frac{3}{4}$	$\bar{1}$·9988802	$42\frac{3}{4}$	$\bar{1}$·9985318
1	$\bar{1}$·9906686	15	$\bar{1}$·9994115	29	$\bar{1}$·9988751	43	$\bar{1}$·9985236
$1\frac{1}{4}$	$\bar{1}$·9925022	$15\frac{1}{4}$	$\bar{1}$·9994017	$29\frac{1}{4}$	$\bar{1}$·9988698	$43\frac{1}{4}$	$\bar{1}$·9985152
$1\frac{1}{2}$	$\bar{1}$·9939771	$15\frac{1}{2}$	$\bar{1}$·9993911	$29\frac{1}{2}$	$\bar{1}$·9988646	$43\frac{1}{2}$	$\bar{1}$·9985068
$1\frac{3}{4}$	$\bar{1}$·9950931	$15\frac{3}{4}$	$\bar{1}$·9993796	$29\frac{3}{4}$	$\bar{1}$·9988593	$43\frac{3}{4}$	$\bar{1}$·9984983
2	$\bar{1}$·9958502	16	$\bar{1}$·9993673	30	$\bar{1}$·9988541	44	$\bar{1}$·9984896
$2\frac{1}{4}$	$\bar{1}$·9962486	$16\frac{1}{4}$	$\bar{1}$·9993541	$30\frac{1}{4}$	$\bar{1}$·9988488	$44\frac{1}{4}$	$\bar{1}$·9984808
$2\frac{1}{2}$	$\bar{1}$·9962880	$16\frac{1}{2}$	$\bar{1}$·9993402	$30\frac{1}{2}$	$\bar{1}$·9988436	$44\frac{1}{2}$	$\bar{1}$·9984719
$2\frac{3}{4}$	$\bar{1}$·9959686	$16\frac{3}{4}$	$\bar{1}$·9993256	$30\frac{3}{4}$	$\bar{1}$·9988382	$44\frac{3}{4}$	$\bar{1}$·9984630
3	$\bar{1}$·9970140	17	$\bar{1}$·9993105	31	$\bar{1}$·9988330	45	$\bar{1}$·9984538
$3\frac{1}{4}$	$\bar{1}$·9972451	$17\frac{1}{4}$	$\bar{1}$·9992946	$31\frac{1}{4}$	$\bar{1}$·9988276	$45\frac{1}{4}$	$\bar{1}$·9984446
$3\frac{1}{2}$	$\bar{1}$·9974581	$17\frac{1}{2}$	$\bar{1}$·9992783	$31\frac{1}{2}$	$\bar{1}$·9988223	$45\frac{1}{2}$	$\bar{1}$·9984352
$3\frac{3}{4}$	$\bar{1}$·9976538	$17\frac{3}{4}$	$\bar{1}$·9992614	$31\frac{3}{4}$	$\bar{1}$·9988169	$45\frac{3}{4}$	$\bar{1}$·9984257
4	$\bar{1}$·9978329	18	$\bar{1}$·9992441	32	$\bar{1}$·9988115	46	$\bar{1}$·9984161
$4\frac{1}{4}$	$\bar{1}$·9979963	$18\frac{1}{4}$	$\bar{1}$·9992264	$32\frac{1}{4}$	$\bar{1}$·9988061	$46\frac{1}{4}$	$\bar{1}$·9984063
$4\frac{1}{2}$	$\bar{1}$·9981445	$18\frac{1}{2}$	$\bar{1}$·9992083	$32\frac{1}{2}$	$\bar{1}$·9988007	$46\frac{1}{2}$	$\bar{1}$·9983965
$4\frac{3}{4}$	$\bar{1}$·9982786	$18\frac{3}{4}$	$\bar{1}$·9991899	$32\frac{3}{4}$	$\bar{1}$·9987952	$46\frac{3}{4}$	$\bar{1}$·9983865
5	$\bar{1}$·9983990	19	$\bar{1}$·9991713	33	$\bar{1}$·9987897	47	$\bar{1}$·9983763
$5\frac{1}{4}$	$\bar{1}$·9985068	$19\frac{1}{4}$	$\bar{1}$·9991524	$33\frac{1}{4}$	$\bar{1}$·9987842	$47\frac{1}{4}$	$\bar{1}$·9983661
$5\frac{1}{2}$	$\bar{1}$·9986024	$19\frac{1}{2}$	$\bar{1}$·9991333	$33\frac{1}{2}$	$\bar{1}$·9987786	$47\frac{1}{2}$	$\bar{1}$·9983557
$5\frac{3}{4}$	$\bar{1}$·9986868	$19\frac{3}{4}$	$\bar{1}$·9991142	$33\frac{3}{4}$	$\bar{1}$·9987730	$47\frac{3}{4}$	$\bar{1}$·9983451
6	$\bar{1}$·9987608	20	$\bar{1}$·9990755	34	$\bar{1}$·9987674	48	$\bar{1}$·9983344
$6\frac{1}{4}$	$\bar{1}$·9988249	$20\frac{1}{4}$	$\bar{1}$·9990693	$34\frac{1}{4}$	$\bar{1}$·9987616	$48\frac{1}{4}$	$\bar{1}$·9983236
$6\frac{1}{2}$	$\bar{1}$·9988801	$20\frac{1}{2}$	$\bar{1}$·9990630	$34\frac{1}{2}$	$\bar{1}$·9987560	$48\frac{1}{2}$	$\bar{1}$·9983126
$6\frac{3}{4}$	$\bar{1}$·9989270	$20\frac{3}{4}$	$\bar{1}$·9990568	$34\frac{3}{4}$	$\bar{1}$·9987502	$48\frac{3}{4}$	$\bar{1}$·9983015
7	$\bar{1}$·9989443	21	$\bar{1}$·9990508	35	$\bar{1}$·9987444	49	$\bar{1}$·9982903
$7\frac{1}{4}$	$\bar{1}$·9989896	$21\frac{1}{4}$	$\bar{1}$·9990447	$35\frac{1}{4}$	$\bar{1}$·9987385	$49\frac{1}{4}$	$\bar{1}$·9982788
$7\frac{1}{2}$	$\bar{1}$·9990324	$21\frac{1}{2}$	$\bar{1}$·9990388	$35\frac{1}{2}$	$\bar{1}$·9987326	$49\frac{1}{2}$	$\bar{1}$·9982673
$7\frac{3}{4}$	$\bar{1}$·9990729	$21\frac{3}{4}$	$\bar{1}$·9990328	$35\frac{3}{4}$	$\bar{1}$·9987267	$49\frac{3}{4}$	$\bar{1}$·9982555
8	$\bar{1}$·9991110	22	$\bar{1}$·9990270	36	$\bar{1}$·9987206	50	$\bar{1}$·9982436
$8\frac{1}{4}$	$\bar{1}$·9991468	$22\frac{1}{4}$	$\bar{1}$·9990211	$36\frac{1}{4}$	$\bar{1}$·9987146	$50\frac{1}{4}$	$\bar{1}$·9982317
$8\frac{1}{2}$	$\bar{1}$·9991802	$22\frac{1}{2}$	$\bar{1}$·9990153	$36\frac{1}{2}$	$\bar{1}$·9987085	$50\frac{1}{2}$	$\bar{1}$·9982194
$8\frac{3}{4}$	$\bar{1}$·9992116	$22\frac{3}{4}$	$\bar{1}$·9990095	$36\frac{3}{4}$	$\bar{1}$·9987023	$50\frac{3}{4}$	$\bar{1}$·9982071
9	$\bar{1}$·9992406	23	$\bar{1}$·9990039	37	$\bar{1}$·9986960	51	$\bar{1}$·9981946
$9\frac{1}{4}$	$\bar{1}$·9992676	$23\frac{1}{4}$	$\bar{1}$·9989982	$37\frac{1}{4}$	$\bar{1}$·9986898	$51\frac{1}{4}$	$\bar{1}$·9981818
$9\frac{1}{2}$	$\bar{1}$·9992925	$23\frac{1}{2}$	$\bar{1}$·9989926	$37\frac{1}{2}$	$\bar{1}$·9986833	$51\frac{1}{2}$	$\bar{1}$·9981691
$9\frac{3}{4}$	$\bar{1}$·9993154	$23\frac{3}{4}$	$\bar{1}$·9989870	$37\frac{3}{4}$	$\bar{1}$·9986770	$51\frac{3}{4}$	$\bar{1}$·9981560
10	$\bar{1}$·9993363	24	$\bar{1}$·9989815	38	$\bar{1}$·9986704	52	$\bar{1}$·9981429
$10\frac{1}{4}$	$\bar{1}$·9993552	$24\frac{1}{4}$	$\bar{1}$·9989759	$38\frac{1}{4}$	$\bar{1}$·9986639	$52\frac{1}{4}$	$\bar{1}$·9981294
$10\frac{1}{2}$	$\bar{1}$·9993723	$24\frac{1}{2}$	$\bar{1}$·9989705	$38\frac{1}{2}$	$\bar{1}$·9986573	$52\frac{1}{2}$	$\bar{1}$·9981160
$10\frac{3}{4}$	$\bar{1}$·9993876	$24\frac{3}{4}$	$\bar{1}$·9989650	$38\frac{3}{4}$	$\bar{1}$·9986505	$52\frac{3}{4}$	$\bar{1}$·9981023
11	$\bar{1}$·9994010	25	$\bar{1}$·9989595	39	$\bar{1}$·9986438	53	$\bar{1}$·9980884
$11\frac{1}{4}$	$\bar{1}$·9994126	$25\frac{1}{4}$	$\bar{1}$·9989542	$39\frac{1}{4}$	$\bar{1}$·9986369	$53\frac{1}{4}$	$\bar{1}$·9980743
$11\frac{1}{2}$	$\bar{1}$·9994227	$25\frac{1}{2}$	$\bar{1}$·9989488	$39\frac{1}{2}$	$\bar{1}$·9986299	$53\frac{1}{2}$	$\bar{1}$·9980601
$11\frac{3}{4}$	$\bar{1}$·9994311	$25\frac{3}{4}$	$\bar{1}$·9989435	$39\frac{3}{4}$	$\bar{1}$·9986230	$53\frac{3}{4}$	$\bar{1}$·9980456
12	$\bar{1}$·9994378	26	$\bar{1}$·9989381	40	$\bar{1}$·9986158	54	$\bar{1}$·9978962
$12\frac{1}{4}$	$\bar{1}$·9994429	$26\frac{1}{4}$	$\bar{1}$·9989328	$40\frac{1}{4}$	$\bar{1}$·9986087	$54\frac{1}{4}$	$\bar{1}$·9978608
$12\frac{1}{2}$	$\bar{1}$·9994467	$26\frac{1}{2}$	$\bar{1}$·9989275	$40\frac{1}{2}$	$\bar{1}$·9986013	$54\frac{1}{2}$	$\bar{1}$·9978252
$12\frac{3}{4}$	$\bar{1}$·9994490	$26\frac{3}{4}$	$\bar{1}$·9989222	$40\frac{3}{4}$	$\bar{1}$·9985941	$54\frac{3}{4}$	$\bar{1}$·9977893
13	$\bar{1}$·9994497	27	$\bar{1}$·9989169	41	$\bar{1}$·9985865	55	$\bar{1}$·9977532
$13\frac{1}{4}$	$\bar{1}$·9994493	$27\frac{1}{4}$	$\bar{1}$·9989117	$41\frac{1}{4}$	$\bar{1}$·9985791	$55\frac{1}{4}$	$\bar{1}$·9977166
$13\frac{1}{2}$	$\bar{1}$·9994474	$27\frac{1}{2}$	$\bar{1}$·9989065	$41\frac{1}{2}$	$\bar{1}$·9985714	$55\frac{1}{2}$	$\bar{1}$·9976797
$13\frac{3}{4}$	$\bar{1}$·9994442	$27\frac{3}{4}$	$\bar{1}$·9989011	$41\frac{3}{4}$	$\bar{1}$·9985637	$55\frac{3}{4}$	$\bar{1}$·9976425

Note.—$\lambda\, p_x = \lambda\, l_{x+\frac{1}{4}} - \lambda\, l_x$.

QUARTERLY TABLE:—FEMALES. Interest 3 per Cent.

Logarithms of the Series $p_x = \lambda$ probability of living *a quarter of a year* after Age x.

Age (x)	$\lambda\, p_x$	**Age** (x)	$\lambda\, p_x$	**Age** (x)	$\lambda\, p_x$	**Age** (x)	$\lambda\, p_x$
56	$\bar{1}\cdot9976046$	70	$\bar{1}\cdot9934201$	84	$\bar{1}\cdot9801240$	98	$\bar{1}\cdot9502115$
56¼	$\bar{1}\cdot9975663$	70¼	$\bar{1}\cdot9932849$	84¼	$\bar{1}\cdot9797578$	98¼	$\bar{1}\cdot9494805$
56½	$\bar{1}\cdot9975275$	70½	$\bar{1}\cdot9931467$	84½	$\bar{1}\cdot9793864$	98½	$\bar{1}\cdot9487417$
56¾	$\bar{1}\cdot9974880$	70¾	$\bar{1}\cdot9930056$	84¾	$\bar{1}\cdot9790096$	98¾	$\bar{1}\cdot9479952$
57	$\bar{1}\cdot9974479$	71	$\bar{1}\cdot9928615$	85	$\bar{1}\cdot9786273$	99	$\bar{1}\cdot9472408$
57¼	$\bar{1}\cdot9974071$	71¼	$\bar{1}\cdot9927141$	85¼	$\bar{1}\cdot9782396$	99¼	$\bar{1}\cdot9464785$
57½	$\bar{1}\cdot9973656$	71½	$\bar{1}\cdot9925638$	85½	$\bar{1}\cdot9778463$	99½	$\bar{1}\cdot9457085$
57¾	$\bar{1}\cdot9973233$	71¾	$\bar{1}\cdot9924103$	85¾	$\bar{1}\cdot9774476$	99¾	$\bar{1}\cdot9449303$
58	$\bar{1}\cdot9972803$	72	$\bar{1}\cdot9922535$	86	$\bar{1}\cdot9770431$	100	$\bar{1}\cdot9441443$
58¼	$\bar{1}\cdot9972363$	72¼	$\bar{1}\cdot9920936$	86¼	$\bar{1}\cdot9766331$	100¼	$\bar{1}\cdot9433502$
58½	$\bar{1}\cdot9971914$	72½	$\bar{1}\cdot9919302$	86½	$\bar{1}\cdot9762174$	100½	$\bar{1}\cdot9425480$
58¾	$\bar{1}\cdot9971457$	72¾	$\bar{1}\cdot9917637$	86¾	$\bar{1}\cdot9757959$	100¾	$\bar{1}\cdot9417377$
59	$\bar{1}\cdot9970989$	73	$\bar{1}\cdot9915937$	87	$\bar{1}\cdot9753687$	101	$\bar{1}\cdot9409192$
59¼	$\bar{1}\cdot9970512$	73¼	$\bar{1}\cdot9914203$	87¼	$\bar{1}\cdot9749357$	101¼	$\bar{1}\cdot9400925$
59½	$\bar{1}\cdot9970023$	73½	$\bar{1}\cdot9912434$	87½	$\bar{1}\cdot9744968$	101½	$\bar{1}\cdot9392577$
59¾	$\bar{1}\cdot9969523$	73¾	$\bar{1}\cdot9910631$	87¾	$\bar{1}\cdot9740520$	101¾	$\bar{1}\cdot9384144$
60	$\bar{1}\cdot9969012$	74	$\bar{1}\cdot9908791$	88	$\bar{1}\cdot9736013$	102	$\bar{1}\cdot9375629$
60¼	$\bar{1}\cdot9968488$	74¼	$\bar{1}\cdot9906917$	88¼	$\bar{1}\cdot9731446$	102¼	$\bar{1}\cdot9367029$
60½	$\bar{1}\cdot9967954$	74½	$\bar{1}\cdot9905005$	88½	$\bar{1}\cdot9726819$	102½	$\bar{1}\cdot9358347$
60¾	$\bar{1}\cdot9967405$	74¾	$\bar{1}\cdot9903057$	88¾	$\bar{1}\cdot9722130$	102¾	$\bar{1}\cdot9349578$
61	$\bar{1}\cdot9966843$	75	$\bar{1}\cdot9901072$	89	$\bar{1}\cdot9717382$	103	$\bar{1}\cdot9340726$
61¼	$\bar{1}\cdot9966268$	75¼	$\bar{1}\cdot9899049$	89¼	$\bar{1}\cdot9712571$	103¼	$\bar{1}\cdot9331787$
61½	$\bar{1}\cdot9965679$	75½	$\bar{1}\cdot9896988$	89½	$\bar{1}\cdot9707699$	103½	$\bar{1}\cdot9322763$
61¾	$\bar{1}\cdot9965075$	75¾	$\bar{1}\cdot9894888$	89¾	$\bar{1}\cdot9702764$	103¾	$\bar{1}\cdot9313652$
62	$\bar{1}\cdot9964456$	76	$\bar{1}\cdot9892751$	90	$\bar{1}\cdot9697766$	104	$\bar{1}\cdot9304455$
62¼	$\bar{1}\cdot9963821$	76¼	$\bar{1}\cdot9890573$	90¼	$\bar{1}\cdot9692705$	104¼	$\bar{1}\cdot9295170$
62½	$\bar{1}\cdot9963172$	76½	$\bar{1}\cdot9888356$	90½	$\bar{1}\cdot9687580$	104½	$\bar{1}\cdot9285798$
62¾	$\bar{1}\cdot9962505$	76¾	$\bar{1}\cdot9886098$	90¾	$\bar{1}\cdot9682392$	104¾	$\bar{1}\cdot9276338$
63	$\bar{1}\cdot9961823$	77	$\bar{1}\cdot9883800$	91	$\bar{1}\cdot9677138$	105	$\bar{1}\cdot9266789$
63¼	$\bar{1}\cdot9961123$	77¼	$\bar{1}\cdot9881461$	91¼	$\bar{1}\cdot9671821$	105¼	$\bar{1}\cdot9257152$
63½	$\bar{1}\cdot9960405$	77½	$\bar{1}\cdot9879081$	91½	$\bar{1}\cdot9666436$	105½	$\bar{1}\cdot9247424$
63¾	$\bar{1}\cdot9959669$	77¾	$\bar{1}\cdot9876658$	91¾	$\bar{1}\cdot9660987$	105¾	$\bar{1}\cdot9237609$
64	$\bar{1}\cdot9958916$	78	$\bar{1}\cdot9874194$	92	$\bar{1}\cdot9655472$	106	$\bar{1}\cdot9227701$
64¼	$\bar{1}\cdot9958143$	78¼	$\bar{1}\cdot9871686$	92¼	$\bar{1}\cdot9649889$	106¼	$\bar{1}\cdot9217704$
64½	$\bar{1}\cdot9957351$	78½	$\bar{1}\cdot9869136$	92½	$\bar{1}\cdot9644240$	106½	$\bar{1}\cdot9207616$
64¾	$\bar{1}\cdot9956539$	78¾	$\bar{1}\cdot9866542$	92¾	$\bar{1}\cdot9638523$	106¾	$\bar{1}\cdot9197436$
65	$\bar{1}\cdot9955708$	79	$\bar{1}\cdot9863903$	93	$\bar{1}\cdot9632738$	107	$\bar{1}\cdot9187165$
65¼	$\bar{1}\cdot9954856$	79¼	$\bar{1}\cdot9861221$	93¼	$\bar{1}\cdot9626885$	107¼	$\bar{1}\cdot9176800$
65½	$\bar{1}\cdot9953983$	79½	$\bar{1}\cdot9858493$	93½	$\bar{1}\cdot9620963$	107½	$\bar{1}\cdot9166344$
65¾	$\bar{1}\cdot9953089$	79¾	$\bar{1}\cdot9855721$	93¾	$\bar{1}\cdot9614971$	107¾	$\bar{1}\cdot9155794$
66	$\bar{1}\cdot9952172$	80	$\bar{1}\cdot9852902$	94	$\bar{1}\cdot9608911$	108	$\bar{1}\cdot9145150$
66¼	$\bar{1}\cdot9951234$	80¼	$\bar{1}\cdot9850037$	94¼	$\bar{1}\cdot9602780$	108¼	$\bar{1}\cdot9134413$
66½	$\bar{1}\cdot9950272$	80½	$\bar{1}\cdot9847127$	94½	$\bar{1}\cdot9596578$	108½	$\bar{1}\cdot9123581$
66¾	$\bar{1}\cdot9949289$	80¾	$\bar{1}\cdot9844168$	94¾	$\bar{1}\cdot9590306$	108¾	$\bar{1}\cdot9112654$
67	$\bar{1}\cdot9948281$	81	$\bar{1}\cdot9841162$	95	$\bar{1}\cdot9583962$		
67¼	$\bar{1}\cdot9947249$	81¼	$\bar{1}\cdot9838109$	95¼	$\bar{1}\cdot9577547$		
67½	$\bar{1}\cdot9946194$	81½	$\bar{1}\cdot9835008$	95½	$\bar{1}\cdot9571059$		
67¾	$\bar{1}\cdot9945113$	81¾	$\bar{1}\cdot9831856$	95¾	$\bar{1}\cdot9564498$		
68	$\bar{1}\cdot9944007$	82	$\bar{1}\cdot9828657$	96	$\bar{1}\cdot9557865$		
68¼	$\bar{1}\cdot9942875$	82¼	$\bar{1}\cdot9825408$	96¼	$\bar{1}\cdot9551158$		
68½	$\bar{1}\cdot9941718$	82½	$\bar{1}\cdot9822109$	96½	$\bar{1}\cdot9544377$		
68¾	$\bar{1}\cdot9940533$	82¾	$\bar{1}\cdot9818759$	96¾	$\bar{1}\cdot9537522$		
69	$\bar{1}\cdot9939323$	83	$\bar{1}\cdot9815359$	97	$\bar{1}\cdot9530591$		
69¼	$\bar{1}\cdot9938084$	83¼	$\bar{1}\cdot9811907$	97¼	$\bar{1}\cdot9523587$		
69½	$\bar{1}\cdot9936819$	83½	$\bar{1}\cdot9808403$	97½	$\bar{1}\cdot9516505$		
69¾	$\bar{1}\cdot9935523$	83¾	$\bar{1}\cdot9804848$	97¾	$\bar{1}\cdot9509349$		

QUARTERLY TABLE:—MALES. Interest 3 per Cent.

Logarithms of the Series $vp_x = \lambda\left(\frac{1}{1+\frac{i}{4}}\cdot\frac{l_{x+\frac{1}{4}}}{l_x}\right)$

Age (x)	$\lambda\ vp_x$	Age (x)	$\lambda\ vp_x$	Age (x)	$\lambda\ vp_x$	Age (x)	$\lambda\ vp_x$
0	$\bar{1}$·9584659	14	$\bar{1}$·9962356	28	$\bar{1}$·9957054	42	$\bar{1}$·9952604
0¼	$\bar{1}$·9817026	14¼	$\bar{1}$·9962305	28¼	$\bar{1}$·9957004	42¼	$\bar{1}$·9952476
0½	$\bar{1}$·9836059	14½	$\bar{1}$·9962239	28½	$\bar{1}$·9956953	42½	$\bar{1}$·9952347
0¾	$\bar{1}$·9856616	14¾	$\bar{1}$·9962163	28¾	$\bar{1}$·9956903	42¾	$\bar{1}$·9952215
1	$\bar{1}$·9878698	15	$\bar{1}$·9962077	29	$\bar{1}$·9956851	43	$\bar{1}$·9952081
1¼	$\bar{1}$·9890657	15¼	$\bar{1}$·9961978	29¼	$\bar{1}$·9956798	43¼	$\bar{1}$·9951944
1½	$\bar{1}$·9901372	15½	$\bar{1}$·9961871	29½	$\bar{1}$·9956746	43½	$\bar{1}$·9951805
1¾	$\bar{1}$·9910846	15¾	$\bar{1}$·9961754	29¾	$\bar{1}$·9956693	43¾	$\bar{1}$·9951663
2	$\bar{1}$·9919075	16	$\bar{1}$·9961628	30	$\bar{1}$·9956638	44	$\bar{1}$·9951519
2¼	$\bar{1}$·9926063	16¼	$\bar{1}$·9961494	30¼	$\bar{1}$·9956584	44¼	$\bar{1}$·9951372
2½	$\bar{1}$·9931805	16½	$\bar{1}$·9961351	30½	$\bar{1}$·9956528	44½	$\bar{1}$·9951223
2¾	$\bar{1}$·9936306	16¾	$\bar{1}$·9961201	30¾	$\bar{1}$·9956472	44¾	$\bar{1}$·9951071
3	$\bar{1}$·9938332	17	$\bar{1}$·9961045	31	$\bar{1}$·9956415	45	$\bar{1}$·9950917
3¼	$\bar{1}$·9940440	17¼	$\bar{1}$·9960881	31¼	$\bar{1}$·9956356	45¼	$\bar{1}$·9950759
3½	$\bar{1}$·9942394	17½	$\bar{1}$·9960713	31½	$\bar{1}$·9956298	45½	$\bar{1}$·9950599
3¾	$\bar{1}$·9944199	17¾	$\bar{1}$·9960539	31¾	$\bar{1}$·9956238	45¾	$\bar{1}$·9950437
4	$\bar{1}$·9945863	18	$\bar{1}$·9960359	32	$\bar{1}$·9956177	46	$\bar{1}$·9950272
4¼	$\bar{1}$·9947391	18¼	$\bar{1}$·9960176	32¼	$\bar{1}$·9956116	46¼	$\bar{1}$·9950103
4½	$\bar{1}$·9948790	18½	$\bar{1}$·9959990	32½	$\bar{1}$·9956053	46½	$\bar{1}$·9949932
4¾	$\bar{1}$·9950065	18¾	$\bar{1}$·9959798	32¾	$\bar{1}$·9955989	46¾	$\bar{1}$·9949758
5	$\bar{1}$·9951224	19	$\bar{1}$·9959606	33	$\bar{1}$·9955925	47	$\bar{1}$·9949582
5¼	$\bar{1}$·9952271	19¼	$\bar{1}$·9959410	33¼	$\bar{1}$·9955858	47¼	$\bar{1}$·9949402
5½	$\bar{1}$·9953215	19½	$\bar{1}$·9959213	33½	$\bar{1}$·9955792	47½	$\bar{1}$·9949219
5¾	$\bar{1}$·9954060	19¾	$\bar{1}$·9959015	33¾	$\bar{1}$·9955723	47¾	$\bar{1}$·9949034
6	$\bar{1}$·9954813	20	$\bar{1}$·9958595	34	$\bar{1}$·9955654	48	$\bar{1}$·9948844
6¼	$\bar{1}$·9955481	20¼	$\bar{1}$·9958543	34¼	$\bar{1}$·9955583	48¼	$\bar{1}$·9948654
6½	$\bar{1}$·9956069	20½	$\bar{1}$·9958491	34½	$\bar{1}$·9955512	48½	$\bar{1}$·9948458
6¾	$\bar{1}$·9956583	20¾	$\bar{1}$·9958441	34¾	$\bar{1}$·9955438	48¾	$\bar{1}$·9948260
7	$\bar{1}$·9956846	21	$\bar{1}$·9958391	35	$\bar{1}$·9955364	49	$\bar{1}$·9948059
7¼	$\bar{1}$·9957339	21¼	$\bar{1}$·9958341	35¼	$\bar{1}$·9955288	49¼	$\bar{1}$·9947855
7½	$\bar{1}$·9957807	21½	$\bar{1}$·9958292	35½	$\bar{1}$·9955210	49½	$\bar{1}$·9947647
7¾	$\bar{1}$·9958248	21¾	$\bar{1}$·9958243	35¾	$\bar{1}$·9955132	49¾	$\bar{1}$·9947437
8	$\bar{1}$·9958665	22	$\bar{1}$·9958194	36	$\bar{1}$·9955052	50	$\bar{1}$·9947222
8¼	$\bar{1}$·9959056	22¼	$\bar{1}$·9958146	36¼	$\bar{1}$·9954969	50¼	$\bar{1}$·9947006
8½	$\bar{1}$·9959422	22½	$\bar{1}$·9958098	36½	$\bar{1}$·9954887	50½	$\bar{1}$·9946784
8¾	$\bar{1}$·9959766	22¾	$\bar{1}$·9958051	36¾	$\bar{1}$·9954802	50¾	$\bar{1}$·9946560
9	$\bar{1}$·9960085	23	$\bar{1}$·9958003	37	$\bar{1}$·9954716	51	$\bar{1}$·9945783
9¼	$\bar{1}$·9960381	23¼	$\bar{1}$·9957956	37¼	$\bar{1}$·9954627	51¼	$\bar{1}$·9945509
9½	$\bar{1}$·9960656	23½	$\bar{1}$·9957909	37½	$\bar{1}$·9954538	51½	$\bar{1}$·9945235
9¾	$\bar{1}$·9960908	23¾	$\bar{1}$·9957862	37¾	$\bar{1}$·9954447	51¾	$\bar{1}$·9944958
10	$\bar{1}$·9961139	24	$\bar{1}$·9957815	38	$\bar{1}$·9954354	52	$\bar{1}$·9944681
10¼	$\bar{1}$·9961349	24¼	$\bar{1}$·9957769	38¼	$\bar{1}$·9954259	52¼	$\bar{1}$·9944402
10½	$\bar{1}$·9961540	24½	$\bar{1}$·9957722	38½	$\bar{1}$·9954162	52½	$\bar{1}$·9944119
10¾	$\bar{1}$·9961709	24¾	$\bar{1}$·9957675	38¾	$\bar{1}$·9954064	52¾	$\bar{1}$·9943835
11	$\bar{1}$·9961861	25	$\bar{1}$·9957628	39	$\bar{1}$·9953963	53	$\bar{1}$·9943546
11¼	$\bar{1}$·9961992	25¼	$\bar{1}$·9957582	39¼	$\bar{1}$·9953862	53¼	$\bar{1}$·9943254
11½	$\bar{1}$·9962107	25½	$\bar{1}$·9957535	39½	$\bar{1}$·9953757	53½	$\bar{1}$·9942959
11¾	$\bar{1}$·9962202	25¾	$\bar{1}$·9957488	39¾	$\bar{1}$·9953651	53¾	$\bar{1}$·9942657
12	$\bar{1}$·9962282	26	$\bar{1}$·9957441	40	$\bar{1}$·9953544	54	$\bar{1}$·9942353
12¼	$\bar{1}$·9962344	26¼	$\bar{1}$·9957393	40¼	$\bar{1}$·9953433	54¼	$\bar{1}$·9942042
12½	$\bar{1}$·9962391	26½	$\bar{1}$·9957346	40½	$\bar{1}$·9953321	54½	$\bar{1}$·9941726
12¾	$\bar{1}$·9962420	26¾	$\bar{1}$·9957298	40¾	$\bar{1}$·9953207	54¾	$\bar{1}$·9941403
13	$\bar{1}$·9962437	27	$\bar{1}$·9957250	41	$\bar{1}$·9953091	55	$\bar{1}$·9941074
13¼	$\bar{1}$·9962437	27¼	$\bar{1}$·9957201	41¼	$\bar{1}$·9952973	55¼	$\bar{1}$·9940739
13½	$\bar{1}$·9962423	27½	$\bar{1}$·9957153	41½	$\bar{1}$·9952851	55½	$\bar{1}$·9940395
13¾	$\bar{1}$·9962397	27¾	$\bar{1}$·9957104	41¾	$\bar{1}$·9952730	55¾	$\bar{1}$·9940045

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Logarithms of the Series $vp_x = \lambda\left(\frac{1}{1+\frac{i}{4}}\cdot\frac{l_{x+\frac{1}{4}}}{l_x}\right)$

Age (x)	$\lambda\ vp_x$	Age (x)	$\lambda\ vp_x$	Age (x)	$\lambda\ vp_x$	Age (x)	$\lambda\ vp_x$
56	$\bar{1}$·9939685	70	$\bar{1}$·9894193	84	$\bar{1}$·9751153	98	$\bar{1}$·9439723
56¼	$\bar{1}$·9939319	70¼	$\bar{1}$·9892705	84¼	$\bar{1}$·9747280	98¼	$\bar{1}$·9432198
56½	$\bar{1}$·9938941	70½	$\bar{1}$·9891185	84½	$\bar{1}$·9743351	98½	$\bar{1}$·9424597
56¾	$\bar{1}$·9938557	70¾	$\bar{1}$·9889633	84¾	$\bar{1}$·9739369	98¾	$\bar{1}$·9416919
57	$\bar{1}$·9938160	71	$\bar{1}$·9888050	85	$\bar{1}$·9735332	99	$\bar{1}$·9409163
57¼	$\bar{1}$·9937756	71¼	$\bar{1}$·9886433	85¼	$\bar{1}$·9731240	99¼	$\bar{1}$·9401329
57½	$\bar{1}$·9937339	71½	$\bar{1}$·9884783	85½	$\bar{1}$·9727090	99½	$\bar{1}$·9393417
57¾	$\bar{1}$·9936912	71¾	$\bar{1}$·9883101	85¾	$\bar{1}$·9722887	99¾	$\bar{1}$·9385425
58	$\bar{1}$·9936474	72	$\bar{1}$·9881383	86	$\bar{1}$·9718625	100	$\bar{1}$·9377356
58¼	$\bar{1}$·9936024	72¼	$\bar{1}$·9879632	86¼	$\bar{1}$·9714308	100¼	$\bar{1}$·9369207
58½	$\bar{1}$·9935561	72½	$\bar{1}$·9877845	86½	$\bar{1}$·9709932	100½	$\bar{1}$·9360977
58¾	$\bar{1}$·9935087	72¾	$\bar{1}$·9876024	86¾	$\bar{1}$·9705499	100¾	$\bar{1}$·9352667
59	$\bar{1}$·9934599	73	$\bar{1}$·9874167	87	$\bar{1}$·9701008	101	$\bar{1}$·9344277
59¼	$\bar{1}$·9934098	73¼	$\bar{1}$·9872275	87¼	$\bar{1}$·9696459	101¼	$\bar{1}$·9335806
59½	$\bar{1}$·9933583	73½	$\bar{1}$·9870345	87½	$\bar{1}$·9691850	101½	$\bar{1}$·9327252
59¾	$\bar{1}$·9933054	73¾	$\bar{1}$·9868379	87¾	$\bar{1}$·9687181	101¾	$\bar{1}$·9318617
60	$\bar{1}$·9932511	74	$\bar{1}$·9866377	88	$\bar{1}$·9682455	102	$\bar{1}$·9309900
60¼	$\bar{1}$·9931952	74¼	$\bar{1}$·9864335	88¼	$\bar{1}$·9677666	102¼	$\bar{1}$·9301100
60½	$\bar{1}$·9931378	74½	$\bar{1}$·9862257	88½	$\bar{1}$·9672818	102½	$\bar{1}$·9292217
60¾	$\bar{1}$·9930788	74¾	$\bar{1}$·9860140	88¾	$\bar{1}$·9667909	102¾	$\bar{1}$·9283249
61	$\bar{1}$·9930183	75	$\bar{1}$·9857985	89	$\bar{1}$·9662938	103	$\bar{1}$·9274200
61¼	$\bar{1}$·9929560	75¼	$\bar{1}$·9855789	89¼	$\bar{1}$·9657905	103¼	$\bar{1}$·9265063
61½	$\bar{1}$·9928920	75½	$\bar{1}$·9853555	89½	$\bar{1}$·9652811	103½	$\bar{1}$·9255844
61¾	$\bar{1}$·9928264	75¾	$\bar{1}$·9851280	89¾	$\bar{1}$·9647654	103¾	$\bar{1}$·9246540
62	$\bar{1}$·9927589	76	$\bar{1}$·9848966	90	$\bar{1}$·9642433	104	$\bar{1}$·9237148
62¼	$\bar{1}$·9926897	76¼	$\bar{1}$·9846610	90¼	$\bar{1}$·9637150	104¼	$\bar{1}$·9227672
62½	$\bar{1}$·9926185	76½	$\bar{1}$·9844213	90½	$\bar{1}$·9631803	104½	$\bar{1}$·9218109
62¾	$\bar{1}$·9925454	76¾	$\bar{1}$·9841774	90¾	$\bar{1}$·9626391	104¾	$\bar{1}$·9208459
63	$\bar{1}$·9924705	77	$\bar{1}$·9839294	91	$\bar{1}$·9620915	105	$\bar{1}$·9198722
63¼	$\bar{1}$·9923935	77¼	$\bar{1}$·9836772	91¼	$\bar{1}$·9615374	105¼	$\bar{1}$·9188898
63½	$\bar{1}$·9923145	77½	$\bar{1}$·9834205	91½	$\bar{1}$·9609767	105½	$\bar{1}$·9178986
63¾	$\bar{1}$·9922335	77¾	$\bar{1}$·9831597	91¾	$\bar{1}$·9604095	105¾	$\bar{1}$·9168984
64	$\bar{1}$·9921503	78	$\bar{1}$·9828945	92	$\bar{1}$·9598356	106	$\bar{1}$·9158895
64¼	$\bar{1}$·9920651	78¼	$\bar{1}$·9826248	92¼	$\bar{1}$·9592552	106¼	$\bar{1}$·9148717
64½	$\bar{1}$·9919775	78½	$\bar{1}$·9823507	92½	$\bar{1}$·9586679	106½	$\bar{1}$·9138447
64¾	$\bar{1}$·9918879	78¾	$\bar{1}$·9820721	92¾	$\bar{1}$·9580740	106¾	$\bar{1}$·9128089
65	$\bar{1}$·9917959	79	$\bar{1}$·9817891	93	$\bar{1}$·9574732	107	$\bar{1}$·9117641
65¼	$\bar{1}$·9917017	79¼	$\bar{1}$·9815013	93¼	$\bar{1}$·9568657	107¼	$\bar{1}$·9107101
65½	$\bar{1}$·9916050	79½	$\bar{1}$·9812092	93½	$\bar{1}$·9562513	107½	$\bar{1}$·9096470
65¾	$\bar{1}$·9915061	79¾	$\bar{1}$·9809122	93¾	$\bar{1}$·9556299	107¾	$\bar{1}$·9085747
66	$\bar{1}$·9914046	80	$\bar{1}$·9806106	94	$\bar{1}$·9550017	108	$\bar{1}$·9074933
66¼	$\bar{1}$·9913007	80¼	$\bar{1}$·9803044	94¼	$\bar{1}$·9543664	108¼	$\bar{1}$·9064026
66½	$\bar{1}$·9911944	80½	$\bar{1}$·9799932	94½	$\bar{1}$·9537242	108½	$\bar{1}$·9053026
66¾	$\bar{1}$·9910854	80¾	$\bar{1}$·9796774	94¾	$\bar{1}$·9530748	108¾	$\bar{1}$·9041934
67	$\bar{1}$·9909739	81	$\bar{1}$·9793566	95	$\bar{1}$·9524184		
67¼	$\bar{1}$·9908598	81¼	$\bar{1}$·9790311	95¼	$\bar{1}$·9517548		
67½	$\bar{1}$·9907429	81½	$\bar{1}$·9787005	95½	$\bar{1}$·9510841		
67¾	$\bar{1}$·9906235	81¾	$\bar{1}$·9783650	95¾	$\bar{1}$·9504060		
68	$\bar{1}$·9905011	82	$\bar{1}$·9780245	96	$\bar{1}$·9497208		
68¼	$\bar{1}$·9903761	82¼	$\bar{1}$·9776789	96¼	$\bar{1}$·9490282		
68½	$\bar{1}$·9902483	82½	$\bar{1}$·9773283	96½	$\bar{1}$·9483283		
68¾	$\bar{1}$·9901174	82¾	$\bar{1}$·9769725	96¾	$\bar{1}$·9476211		
69	$\bar{1}$·9899838	83	$\bar{1}$·9766116	97	$\bar{1}$·9469062		
69¼	$\bar{1}$·9898472	83¼	$\bar{1}$·9762455	97¼	$\bar{1}$·9461841		
69½	$\bar{1}$·9897076	83½	$\bar{1}$·9758740	97½	$\bar{1}$·9454544		
69¾	$\bar{1}$·9895650	83¾	$\bar{1}$·9754974	97¾	$\bar{1}$·9447172		

QUARTERLY TABLE:—FEMALES. Interest 3 per Cent.

Logarithms of the Series $vp_x = \lambda \left(\frac{1}{1 + \frac{i}{4}} \cdot \frac{l_{x+\frac{1}{4}}}{l_x} \right)$

Age (x)	$\lambda\, vp_x$	Age (x)	$\lambda\, vp_x$	Age (x)	$\lambda\, vp_x$	Age (x)	$\lambda\, vp_x$
0	$\bar{1}$·9666575	14	$\bar{1}$·9961949	28	$\bar{1}$·9956509	42	$\bar{1}$·9953107
0¼	$\bar{1}$·9844553	14¼	$\bar{1}$·9961894	28¼	$\bar{1}$·9956456	42¼	$\bar{1}$·9953029
0½	$\bar{1}$·9860389	14½	$\bar{1}$·9961827	28½	$\bar{1}$·9956405	42½	$\bar{1}$·9952948
0¾	$\bar{1}$·9870283	14¾	$\bar{1}$·9961750	28¾	$\bar{1}$·9956351	42¾	$\bar{1}$·9952867
1	$\bar{1}$·9874235	15	$\bar{1}$·9961664	29	$\bar{1}$·9956300	43	$\bar{1}$·9952785
1¼	$\bar{1}$·9892571	15¼	$\bar{1}$·9961566	29¼	$\bar{1}$·9956247	43¼	$\bar{1}$·9952701
1½	$\bar{1}$·9907320	15½	$\bar{1}$·9961460	29½	$\bar{1}$·9956195	43½	$\bar{1}$·9952617
1¾	$\bar{1}$·9918480	15¾	$\bar{1}$·9961345	29¾	$\bar{1}$·9956142	43¾	$\bar{1}$·9952532
2	$\bar{1}$·9926051	16	$\bar{1}$·9961222	30	$\bar{1}$·9956090	44	$\bar{1}$·9952445
2¼	$\bar{1}$·9930035	16¼	$\bar{1}$·9961090	30¼	$\bar{1}$·9956037	44¼	$\bar{1}$·9952357
2½	$\bar{1}$·9930429	16½	$\bar{1}$·9960951	30½	$\bar{1}$·9955985	44½	$\bar{1}$·9952268
2¾	$\bar{1}$·9927235	16¾	$\bar{1}$·9960805	30¾	$\bar{1}$·9955931	44¾	$\bar{1}$·9952179
3	$\bar{1}$·9937689	17	$\bar{1}$·9960654	31	$\bar{1}$·9955879	45	$\bar{1}$·9952087
3¼	$\bar{1}$·9940000	17¼	$\bar{1}$·9960495	31¼	$\bar{1}$·9955825	45¼	$\bar{1}$·9951995
3½	$\bar{1}$·9942130	17½	$\bar{1}$·9960332	31½	$\bar{1}$·9955772	45½	$\bar{1}$·9951901
3¾	$\bar{1}$·9944087	17¾	$\bar{1}$·9960163	31¾	$\bar{1}$·9955718	45¾	$\bar{1}$·9951806
4	$\bar{1}$·9945878	18	$\bar{1}$·9959990	32	$\bar{1}$·9955664	46	$\bar{1}$·9951710
4¼	$\bar{1}$·9947512	18¼	$\bar{1}$·9959813	32¼	$\bar{1}$·9955610	46¼	$\bar{1}$·9951612
4½	$\bar{1}$·9948994	18½	$\bar{1}$·9959632	32½	$\bar{1}$·9955556	46½	$\bar{1}$·9951514
4¾	$\bar{1}$·9950335	18¾	$\bar{1}$·9959448	32¾	$\bar{1}$·9955501	46¾	$\bar{1}$·9951414
5	$\bar{1}$·9951539	19	$\bar{1}$·9959262	33	$\bar{1}$·9955446	47	$\bar{1}$·9951312
5¼	$\bar{1}$·9952617	19¼	$\bar{1}$·9959073	33¼	$\bar{1}$·9955391	47¼	$\bar{1}$·9951210
5½	$\bar{1}$·9953573	19½	$\bar{1}$·9958882	33½	$\bar{1}$·9955335	47½	$\bar{1}$·9951106
5¾	$\bar{1}$·9954417	19¾	$\bar{1}$·9958691	33¾	$\bar{1}$·9955279	47¾	$\bar{1}$·9951000
6	$\bar{1}$·9955157	20	$\bar{1}$·9958304	34	$\bar{1}$·9955223	48	$\bar{1}$·9950893
6¼	$\bar{1}$·9955798	20¼	$\bar{1}$·9958242	34¼	$\bar{1}$·9955165	48¼	$\bar{1}$·9950785
6½	$\bar{1}$·9956350	20½	$\bar{1}$·9958179	34½	$\bar{1}$·9955109	48½	$\bar{1}$·9950675
6¾	$\bar{1}$·9956819	20¾	$\bar{1}$·9958117	34¾	$\bar{1}$·9955051	48¾	$\bar{1}$·9950564
7	$\bar{1}$·9956992	21	$\bar{1}$·9958057	35	$\bar{1}$·9954993	49	$\bar{1}$·9950452
7¼	$\bar{1}$·9957445	21¼	$\bar{1}$·9957996	35¼	$\bar{1}$·9954934	49¼	$\bar{1}$·9950337
7½	$\bar{1}$·9957873	21½	$\bar{1}$·9957937	35½	$\bar{1}$·9954875	49½	$\bar{1}$·9950222
7¾	$\bar{1}$·9958278	21¾	$\bar{1}$·9957877	35¾	$\bar{1}$·9954816	49¾	$\bar{1}$·9950104
8	$\bar{1}$·9958659	22	$\bar{1}$·9957819	36	$\bar{1}$·9954755	50	$\bar{1}$·9949985
8¼	$\bar{1}$·9959017	22¼	$\bar{1}$·9957760	36¼	$\bar{1}$·9954695	50¼	$\bar{1}$·9949866
8½	$\bar{1}$·9959351	22½	$\bar{1}$·9957702	36½	$\bar{1}$·9954634	50½	$\bar{1}$·9949743
8¾	$\bar{1}$·9959665	22¾	$\bar{1}$·9957644	36¾	$\bar{1}$·9954572	50¾	$\bar{1}$·9949620
9	$\bar{1}$·9959955	23	$\bar{1}$·9957588	37	$\bar{1}$·9954509	51	$\bar{1}$·9949495
9¼	$\bar{1}$·9960225	23¼	$\bar{1}$·9957531	37¼	$\bar{1}$·9954447	51¼	$\bar{1}$·9949367
9½	$\bar{1}$·9960474	23½	$\bar{1}$·9957475	37½	$\bar{1}$·9954382	51½	$\bar{1}$·9949240
9¾	$\bar{1}$·9960703	23¾	$\bar{1}$·9957419	37¾	$\bar{1}$·9954319	51¾	$\bar{1}$·9949109
10	$\bar{1}$·9960912	24	$\bar{1}$·9957364	38	$\bar{1}$·9954253	52	$\bar{1}$·9948978
10¼	$\bar{1}$·9961101	24¼	$\bar{1}$·9957308	38¼	$\bar{1}$·9954188	52¼	$\bar{1}$·9948843
10½	$\bar{1}$·9961272	24½	$\bar{1}$·9957254	38½	$\bar{1}$·9954122	52½	$\bar{1}$·9948709
10¾	$\bar{1}$·9961425	24¾	$\bar{1}$·9957199	38¾	$\bar{1}$·9954054	52¾	$\bar{1}$·9948572
11	$\bar{1}$·9961559	25	$\bar{1}$·9957144	39	$\bar{1}$·9953987	53	$\bar{1}$·9948433
11¼	$\bar{1}$·9961675	25¼	$\bar{1}$·9957091	39¼	$\bar{1}$·9953918	53¼	$\bar{1}$·9948292
11½	$\bar{1}$·9961776	25½	$\bar{1}$·9957037	39½	$\bar{1}$·9953848	53½	$\bar{1}$·9948150
11¾	$\bar{1}$·9961860	25¾	$\bar{1}$·9956984	39¾	$\bar{1}$·9953779	53¾	$\bar{1}$·9948005
12	$\bar{1}$·9961927	26	$\bar{1}$·9956930	40	$\bar{1}$·9953707	54	$\bar{1}$·9946511
12¼	$\bar{1}$·9961978	26¼	$\bar{1}$·9956877	40¼	$\bar{1}$·9953636	54¼	$\bar{1}$·9946157
12½	$\bar{1}$·9962016	26½	$\bar{1}$·9956824	40½	$\bar{1}$·9953562	54½	$\bar{1}$·9945801
12¾	$\bar{1}$·9962039	26¾	$\bar{1}$·9956771	40¾	$\bar{1}$·9953490	54¾	$\bar{1}$·9945442
13	$\bar{1}$·9962046	27	$\bar{1}$·9956718	41	$\bar{1}$·9953414	55	$\bar{1}$·9945081
13¼	$\bar{1}$·9962042	27¼	$\bar{1}$·9956666	41¼	$\bar{1}$·9953340	55¼	$\bar{1}$·9944715
13½	$\bar{1}$·9962023	27½	$\bar{1}$·9956614	41½	$\bar{1}$·9953263	55½	$\bar{1}$·9944346
13¾	$\bar{1}$·9961991	27¾	$\bar{1}$·9956560	41¾	$\bar{1}$·9953186	55¾	$\bar{1}$·9943974

QUARTERLY TABLE:—FEMALES. Interest 3 per Cent.

Logarithms of the Series $vp_x = \lambda\left(\frac{1}{1+\frac{i}{4}}\cdot\frac{l_{x+\frac{1}{4}}}{l_x}\right)$

Age (x)	$\lambda\ vp_x$	Age (x)	$\lambda\ vp_x$	Age (x)	$\lambda\ vp_x$	Age (x)	$\lambda\ vp_x$
56	$\bar{1}\cdot9943595$	70	$\bar{1}\cdot9901750$	84	$\bar{1}\cdot9768789$	98	$\bar{1}\cdot9469664$
$56\frac{1}{4}$	$\bar{1}\cdot9943212$	$70\frac{1}{4}$	$\bar{1}\cdot9900398$	$84\frac{1}{4}$	$\bar{1}\cdot9765127$	$98\frac{1}{4}$	$\bar{1}\cdot9462354$
$56\frac{1}{2}$	$\bar{1}\cdot9942824$	$70\frac{1}{2}$	$\bar{1}\cdot9899016$	$84\frac{1}{2}$	$\bar{1}\cdot9761413$	$98\frac{1}{2}$	$\bar{1}\cdot9454966$
$56\frac{3}{4}$	$\bar{1}\cdot9942429$	$70\frac{3}{4}$	$\bar{1}\cdot9897605$	$84\frac{3}{4}$	$\bar{1}\cdot9757645$	$98\frac{3}{4}$	$\bar{1}\cdot9447501$
57	$\bar{1}\cdot9942028$	71	$\bar{1}\cdot9896164$	85	$\bar{1}\cdot9753822$	99	$\bar{1}\cdot9439957$
$57\frac{1}{4}$	$\bar{1}\cdot9941620$	$71\frac{1}{4}$	$\bar{1}\cdot9894690$	$85\frac{1}{4}$	$\bar{1}\cdot9749945$	$99\frac{1}{4}$	$\bar{1}\cdot9432334$
$57\frac{1}{2}$	$\bar{1}\cdot9941205$	$71\frac{1}{2}$	$\bar{1}\cdot9893187$	$85\frac{1}{2}$	$\bar{1}\cdot9746012$	$99\frac{1}{2}$	$\bar{1}\cdot9424634$
$57\frac{3}{4}$	$\bar{1}\cdot9940782$	$71\frac{3}{4}$	$\bar{1}\cdot9891652$	$85\frac{3}{4}$	$\bar{1}\cdot9742025$	$99\frac{3}{4}$	$\bar{1}\cdot9416852$
58	$\bar{1}\cdot9940352$	72	$\bar{1}\cdot9890084$	86	$\bar{1}\cdot9737980$	100	$\bar{1}\cdot9408992$
$58\frac{1}{4}$	$\bar{1}\cdot9939912$	$72\frac{1}{4}$	$\bar{1}\cdot9888485$	$86\frac{1}{4}$	$\bar{1}\cdot9733880$	$100\frac{1}{4}$	$\bar{1}\cdot9401051$
$58\frac{1}{2}$	$\bar{1}\cdot9939463$	$72\frac{1}{2}$	$\bar{1}\cdot9886851$	$86\frac{1}{2}$	$\bar{1}\cdot9729723$	$100\frac{1}{2}$	$\bar{1}\cdot9393029$
$58\frac{3}{4}$	$\bar{1}\cdot9939006$	$72\frac{3}{4}$	$\bar{1}\cdot9885186$	$86\frac{3}{4}$	$\bar{1}\cdot9725508$	$100\frac{3}{4}$	$\bar{1}\cdot9384926$
59	$\bar{1}\cdot9938538$	73	$\bar{1}\cdot9883486$	87	$\bar{1}\cdot9721236$	101	$\bar{1}\cdot9376741$
$59\frac{1}{4}$	$\bar{1}\cdot9938061$	$73\frac{1}{4}$	$\bar{1}\cdot9881752$	$87\frac{1}{4}$	$\bar{1}\cdot9716906$	$101\frac{1}{4}$	$\bar{1}\cdot9368474$
$59\frac{1}{2}$	$\bar{1}\cdot9937572$	$73\frac{1}{2}$	$\bar{1}\cdot9879983$	$87\frac{1}{2}$	$\bar{1}\cdot9712517$	$101\frac{1}{2}$	$\bar{1}\cdot9360126$
$59\frac{3}{4}$	$\bar{1}\cdot9937072$	$73\frac{3}{4}$	$\bar{1}\cdot9878180$	$87\frac{3}{4}$	$\bar{1}\cdot9708069$	$101\frac{3}{4}$	$\bar{1}\cdot9351693$
60	$\bar{1}\cdot9936561$	74	$\bar{1}\cdot9876340$	88	$\bar{1}\cdot9703562$	102	$\bar{1}\cdot9343178$
$60\frac{1}{4}$	$\bar{1}\cdot9936037$	$74\frac{1}{4}$	$\bar{1}\cdot9874466$	$88\frac{1}{4}$	$\bar{1}\cdot9698995$	$102\frac{1}{4}$	$\bar{1}\cdot9334578$
$60\frac{1}{2}$	$\bar{1}\cdot9935503$	$74\frac{1}{2}$	$\bar{1}\cdot9872554$	$88\frac{1}{2}$	$\bar{1}\cdot9694368$	$102\frac{1}{2}$	$\bar{1}\cdot9325896$
$60\frac{3}{4}$	$\bar{1}\cdot9934954$	$74\frac{3}{4}$	$\bar{1}\cdot9870606$	$88\frac{3}{4}$	$\bar{1}\cdot9689679$	$102\frac{3}{4}$	$\bar{1}\cdot9317127$
61	$\bar{1}\cdot9934392$	75	$\bar{1}\cdot9868621$	89	$\bar{1}\cdot9684931$	103	$\bar{1}\cdot9308275$
$61\frac{1}{4}$	$\bar{1}\cdot9933817$	$75\frac{1}{4}$	$\bar{1}\cdot9866598$	$89\frac{1}{4}$	$\bar{1}\cdot9680120$	$103\frac{1}{4}$	$\bar{1}\cdot9299336$
$61\frac{1}{2}$	$\bar{1}\cdot9933228$	$75\frac{1}{2}$	$\bar{1}\cdot9864537$	$89\frac{1}{2}$	$\bar{1}\cdot9675248$	$103\frac{1}{2}$	$\bar{1}\cdot9290312$
$61\frac{3}{4}$	$\bar{1}\cdot9932624$	$75\frac{3}{4}$	$\bar{1}\cdot9862437$	$89\frac{3}{4}$	$\bar{1}\cdot9670313$	$103\frac{3}{4}$	$\bar{1}\cdot9281201$
62	$\bar{1}\cdot9932005$	76	$\bar{1}\cdot9860300$	90	$\bar{1}\cdot9665315$	104	$\bar{1}\cdot9272004$
$62\frac{1}{4}$	$\bar{1}\cdot9931370$	$76\frac{1}{4}$	$\bar{1}\cdot9858122$	$90\frac{1}{4}$	$\bar{1}\cdot9660254$	$104\frac{1}{4}$	$\bar{1}\cdot9262719$
$62\frac{1}{2}$	$\bar{1}\cdot9930721$	$76\frac{1}{2}$	$\bar{1}\cdot9855905$	$90\frac{1}{2}$	$\bar{1}\cdot9655129$	$104\frac{1}{2}$	$\bar{1}\cdot9253347$
$62\frac{3}{4}$	$\bar{1}\cdot9930054$	$76\frac{3}{4}$	$\bar{1}\cdot9853647$	$90\frac{3}{4}$	$\bar{1}\cdot9649941$	$104\frac{3}{4}$	$\bar{1}\cdot9243887$
63	$\bar{1}\cdot9929372$	77	$\bar{1}\cdot9851349$	91	$\bar{1}\cdot9644687$	105	$\bar{1}\cdot9234338$
$63\frac{1}{4}$	$\bar{1}\cdot9928672$	$77\frac{1}{4}$	$\bar{1}\cdot9849010$	$91\frac{1}{4}$	$\bar{1}\cdot9639370$	$105\frac{1}{4}$	$\bar{1}\cdot9224701$
$63\frac{1}{2}$	$\bar{1}\cdot9927954$	$77\frac{1}{2}$	$\bar{1}\cdot9846630$	$91\frac{1}{2}$	$\bar{1}\cdot9633985$	$105\frac{1}{2}$	$\bar{1}\cdot9214973$
$63\frac{3}{4}$	$\bar{1}\cdot9927218$	$77\frac{3}{4}$	$\bar{1}\cdot9844207$	$91\frac{3}{4}$	$\bar{1}\cdot9628536$	$105\frac{3}{4}$	$\bar{1}\cdot9205158$
64	$\bar{1}\cdot9926465$	78	$\bar{1}\cdot9841743$	92	$\bar{1}\cdot9623021$	106	$\bar{1}\cdot9195250$
$64\frac{1}{4}$	$\bar{1}\cdot9925692$	$78\frac{1}{4}$	$\bar{1}\cdot9839235$	$92\frac{1}{4}$	$\bar{1}\cdot9617438$	$106\frac{1}{4}$	$\bar{1}\cdot9185253$
$64\frac{1}{2}$	$\bar{1}\cdot9924900$	$78\frac{1}{2}$	$\bar{1}\cdot9836685$	$92\frac{1}{2}$	$\bar{1}\cdot9611789$	$106\frac{1}{2}$	$\bar{1}\cdot9175165$
$64\frac{3}{4}$	$\bar{1}\cdot9924088$	$78\frac{3}{4}$	$\bar{1}\cdot9834091$	$92\frac{3}{4}$	$\bar{1}\cdot9606072$	$106\frac{3}{4}$	$\bar{1}\cdot9164985$
65	$\bar{1}\cdot9923257$	79	$\bar{1}\cdot9831452$	93	$\bar{1}\cdot9600287$	107	$\bar{1}\cdot9154714$
$65\frac{1}{4}$	$\bar{1}\cdot9922405$	$79\frac{1}{4}$	$\bar{1}\cdot9828770$	$93\frac{1}{4}$	$\bar{1}\cdot9594434$	$107\frac{1}{4}$	$\bar{1}\cdot9144349$
$65\frac{1}{2}$	$\bar{1}\cdot9921532$	$79\frac{1}{2}$	$\bar{1}\cdot9826042$	$93\frac{1}{2}$	$\bar{1}\cdot9588512$	$107\frac{1}{2}$	$\bar{1}\cdot9133893$
$65\frac{3}{4}$	$\bar{1}\cdot9920638$	$79\frac{3}{4}$	$\bar{1}\cdot9823270$	$93\frac{3}{4}$	$\bar{1}\cdot9582520$	$107\frac{3}{4}$	$\bar{1}\cdot9123343$
66	$\bar{1}\cdot9919721$	80	$\bar{1}\cdot9820451$	94	$\bar{1}\cdot9576460$	108	$\bar{1}\cdot9112699$
$66\frac{1}{4}$	$\bar{1}\cdot9918783$	$80\frac{1}{4}$	$\bar{1}\cdot9817586$	$94\frac{1}{4}$	$\bar{1}\cdot9570329$	$108\frac{1}{4}$	$\bar{1}\cdot9101962$
$66\frac{1}{2}$	$\bar{1}\cdot9917821$	$80\frac{1}{2}$	$\bar{1}\cdot9814676$	$94\frac{1}{2}$	$\bar{1}\cdot9564127$	$108\frac{1}{2}$	$\bar{1}\cdot9091130$
$66\frac{3}{4}$	$\bar{1}\cdot9916838$	$80\frac{3}{4}$	$\bar{1}\cdot9811717$	$94\frac{3}{4}$	$\bar{1}\cdot9557855$	$108\frac{3}{4}$	$\bar{1}\cdot9080203$
67	$\bar{1}\cdot9915830$	81	$\bar{1}\cdot9808711$	95	$\bar{1}\cdot9551511$		
$67\frac{1}{4}$	$\bar{1}\cdot9914798$	$81\frac{1}{4}$	$\bar{1}\cdot9805658$	$95\frac{1}{4}$	$\bar{1}\cdot9545096$		
$67\frac{1}{2}$	$\bar{1}\cdot9913743$	$81\frac{1}{2}$	$\bar{1}\cdot9802557$	$95\frac{1}{2}$	$\bar{1}\cdot9538608$		
$67\frac{3}{4}$	$\bar{1}\cdot9912662$	$81\frac{3}{4}$	$\bar{1}\cdot9799405$	$95\frac{3}{4}$	$\bar{1}\cdot9532047$		
68	$\bar{1}\cdot9911556$	82	$\bar{1}\cdot9796206$	96	$\bar{1}\cdot9525414$		
$68\frac{1}{4}$	$\bar{1}\cdot9910424$	$82\frac{1}{4}$	$\bar{1}\cdot9792957$	$96\frac{1}{4}$	$\bar{1}\cdot9518707$		
$68\frac{1}{2}$	$\bar{1}\cdot9909267$	$82\frac{1}{2}$	$\bar{1}\cdot9789658$	$96\frac{1}{2}$	$\bar{1}\cdot9511926$		
$68\frac{3}{4}$	$\bar{1}\cdot9908082$	$82\frac{3}{4}$	$\bar{1}\cdot9786308$	$96\frac{3}{4}$	$\bar{1}\cdot9505071$		
69	$\bar{1}\cdot9906872$	83	$\bar{1}\cdot9782908$	97	$\bar{1}\cdot9498140$		
$69\frac{1}{4}$	$\bar{1}\cdot9905633$	$83\frac{1}{4}$	$\bar{1}\cdot9779456$	$97\frac{1}{4}$	$\bar{1}\cdot9491136$		
$69\frac{1}{2}$	$\bar{1}\cdot9904368$	$83\frac{1}{2}$	$\bar{1}\cdot9775952$	$97\frac{1}{2}$	$\bar{1}\cdot9484054$		
$69\frac{3}{4}$	$\bar{1}\cdot9903072$	$83\frac{3}{4}$	$\bar{1}\cdot9772397$	$97\frac{3}{4}$	$\bar{1}\cdot9476898$		

QUARTERLY TABLE:—MALES.

Logarithms of the Series D_x; Rate of Interest 3 per Cent.

MALES.

Age (x) Quarter Years.	λD_x	Age (x) Quarter Years.	λD_x	Age (x) Quarter Years.	λD_x	Age (x) Quarter Years.	λD_x
0	5·7090538	55	5·3610747	110	5·1373030	165	4·8921363
1	5·6675197	56	5·3573144	111	5·1330183	166	4·8874336
2	5·6492224	57	5·3535501	112	5·1287287	167	4·8827188
3	5·6328283	58	5·3497806	113	5·1244342	168	4·8779917
4	5·6184900	59	5·3460046	114	5·1201346	169	4·8732522
5	5·6063598	60	5·3422210	115	5·1158300	170	4·8684999
6	5·5954255	61	5·3384286	116	5·1115203	171	4·8637346
7	5·5855628	62	5·3346265	117	5·1072054	172	4·8589562
8	5·5766475	63	5·3308137	118	5·1028854	173	4·8541643
9	5·5685551	64	5·3269891	119	5·0985600	174	4·8493588
10	5·5611613	65	5·3231519	120	5·0942293	175	4·8445393
11	5·5543419	66	5·3193013	121	5·0898932	176	4·8397056
12	5·5479725	67	5·3154365	122	5·0855516	177	4·8348576
13	5·5418058	68	5·3115567	123	5·0812045	178	4·8299948
14	5·5358498	69	5·3076612	124	5·0768517	179	4·8251172
15	5·5300892	70	5·3037494	125	5·0724932	180	4·8202243
16	5·5245092	71	5·2998207	126	5·0681289	181	4·8153160
17	5·5190956	72	5·2958746	127	5·0637587	182	4·8103920
18	5·5138347	73	5·2919106	128	5·0593826	183	4·8054520
19	5·5087137	74	5·2879283	129	5·0550004	184	4·8004957
20	5·5037203	75	5·2839272	130	5·0506120	185	4·7955229
21	5·4988427	76	5·2799072	131	5·0462173	186	4·7905333
22	5·4940699	77	5·2758678	132	5·0418163	187	4·7855266
23	5·4893914	78	5·2718080	133	5·0374088	188	4·7805024
24	5·4847975	79	5·2677302	134	5·0329947	189	4·7754606
25	5·4802788	80	5·2636317	135	5·0285739	190	4·7704009
26	5·4758269	81	5·2594912	136	5·0241463	191	4·7653228
27	5·4714339	82	5·2553456	137	5·0197117	192	4·7602262
28	5·4670923	83	5·2511948	138	5·0152701	193	4·7551108
29	5·4627769	84	5·2470389	139	5·0108213	194	4·7499761
30	5·4585109	85	5·2428780	140	5·0063651	195	4·7448220
31	5·4542916	86	5·2387122	141	5·0019015	196	4·7396481
32	5·4501165	87	5·2345414	142	4·9974304	197	4·7344540
33	5·4459830	88	5·2303657	143	4·9929515	198	4·7292396
34	5·4418886	89	5·2261852	144	4·9884647	199	4·7240043
35	5·4378309	90	5·2219999	145	4·9839699	200	4·7187480
36	5·4338075	91	5·2178097	146	4·9794669	201	4·7134703
37	5·4298160	92	5·2136148	147	4·9749557	202	4·7081709
38	5·4258542	93	5·2094152	148	4·9704359	203	4·7028494
39	5·4219198	94	5·2052108	149	4·9659075	204	4·6975054
40	5·4180107	95	5·2010018	150	4·9613703	205	4·6920838
41	5·4141246	96	5·1967880	151	4·9568242	206	4·6866347
42	5·4102596	97	5·1925696	152	4·9522689	207	4·6811582
43	5·4064136	98	5·1883465	153	4·9477043	208	4·6756541
44	5·4025846	99	5·1841187	154	4·9431302	209	4·6701223
45	5·3987707	100	5·1798863	155	4·9385465	210	4·6645625
46	5·3949700	101	5·1756492	156	4·9339529	211	4·6589745
47	5·3911807	102	5·1714074	157	4·9293493	212	4·6533579
48	5·3874010	103	5·1671609	158	4·9247355	213	4·6477126
49	5·3836292	104	5·1629098	159	4·9201113	214	4·6420381
50	5·3798637	105	5·1586539	160	4·9154765	215	4·6363340
51	5·3761028	106	5·1543933	161	4·9108308	216	4·6305998
52	5·3723449	107	5·1501279	162	4·9061742	217	4·6248351
53	5·3685886	108	5·1458578	163	4·9015064	218	4·6190393
54	5·3648323	109	5·1415828	164	4·8968272	219	4·6132120

QUARTERLY TABLE:—MALES.

Logarithms of the Series D_x; Rate of Interest 3 per Cent.

MALES.

Age (x) Quarter Years.	λ D_x	Age (x) Quarter Years.	λ D_x	Age (x) Quarter Years.	λ D_x	Age (x) Quarter Years.	λ D_x
220	4·6073523	275	4·2004753	330	3·3673231	385	1·4427237
221	4·6014598	276	4·1905928	331	3·3446515	386	1·3917520
222	4·5955337	277	4·1805767	332	3·3216240	387	1·3400803
223	4·5895733	278	4·1704239	333	3·2982357	388	1·2877014
224	4·5835778	279	4·1601315	334	3·2744811	389	1·2346077
225	4·5775464	280	4·1496966	335	3·2503552	390	1·1807919
226	4·5714783	281	4·1391159	336	3·2258526	391	1·1262463
227	4·5653725	282	4·1283864	337	3·2009680	392	1·0709635
228	4·5592282	283	4·1175049	338	3·1756960	393	1·0149358
229	4·5530443	284	4·1064683	339	3·1500312	394	0·9581557
230	4·5468199	285	4·0952734	340	3·1239682	395	0·9006155
231	4·5405538	286	4·0839167	341	3·0975014	396	0·8423074
232	4·5342451	287	4·0723951	342	3·0706254	397	0·7832237
233	4·5278925	288	4·0607052	343	3·0433345	398	0·7233567
234	4·5214949	289	4·0488135	344	3·0156232	399	0·6626984
235	4·5150511	290	4·0368068	345	2·9874858	400	0·6012410
236	4·5085593	291	4·0245914	346	2·9589166	401	0·5389767
237	4·5020198	292	4·0121938	347	2·9299099	402	0·4758974
238	4·4954296	293	3·9996106	348	2·9004598	403	0·4119951
239	4·4887880	294	3·9868381	349	2·8705607	404	0·3472619
240	4·4820935	295	3·9738726	350	2·8402066	405	0·2816896
241	4·4753446	296	3·9607106	351	2·8093916	406	0·2152702
242	4·4685398	297	3·9473483	352	2·7781099	407	0·1479955
243	4·4616777	298	3·9337819	353	2·7463553	408	0·0798573
244	4·4547565	299	3·9200076	354	2·7141220	409	0·0108473
245	4·4477748	300	3·9060217	355	2·6814039	410	9·9409573
246	4·4407309	301	3·8918202	356	2·6481948	411	9·8701790
247	4·4336230	302	3·8773991	357	2·6144586	412	9·7985041
248	4·4264494	303	3·8627547	358	2·5802792	413	9·7259240
249	4·4192084	304	3·8478827	359	2·5455603	414	9·6524305
250	4·4118981	305	3·8327793	360	2·5103257	415	9·5780149
251	4·4045166	306	3·8174404	361	2·4745691	416	9·5026689
252	4·3970621	307	3·8018617	362	2·4382842	417	9·4263837
253	4·3895326	308	3·7860392	363	2·4014645	418	9·3491510
254	4·3819262	309	3·7699687	364	2·3641036	419	9·2709619
255	4·3742408	310	3·7536459	365	2·3261952	420	9·1918079
256	4·3664743	311	3·7370665	366	2·2877326	421	9·1116802
257	4·3586247	312	3·7202262	367	2·2487094	422	9·0305700
258	4·3506897	313	3·7031207	368	2·2091189	423	8·9484686
259	4·3426674	314	3·6857456	369	2·1689546	424	8·8653671
260	4·3345553	315	3·6680963	370	2·1282098	425	8·7812566
261	4·3263512	316	3·6501685	371	2·0868778	426	8·6961283
262	4·3180529	317	3·6319576	372	2·0449518	427	8·6099731
263	4·3096580	318	3·6134590	373	2·0024251	428	8·5227821
264	4·3011641	319	3·5946682	374	1·9592908	429	8·4345462
265	4·2925688	320	3·5755805	375	1·9155421	430	8·3452563
266	4·2838695	321	3·5561911	376	1·8711721	431	8·2549033
267	4·2750640	322	3·5364955	377	1·8261738	432	8·1634781
268	4·2661494	323	3·5164888	378	1·7805403	433	8·0709715
269	4·2571234	324	3·4961662	379	1·7342645	434	7·9773741
270	4·2479832	325	3·4755229	380	1·6873394	435	7·8826768
271	4·2387262	326	3·4545540	381	1·6397578	436	7·7868702
272	4·2293496	327	3·4332546	382	1·5915127		
273	4·2198509	328	3·4116196	383	1·5425968		
274	4·2102270	329	3·3896441	384	1·4930029		

QUARTERLY TABLE:—FEMALES.

Logarithms of the Series D_x; Rate of Interest 3 per Cent.

FEMALES.

Age (x) Quarter Years.	λ D_x	Age (x) Quarter Years.	λ D_x	Age (x) Quarter Years.	λ D_x	Age (x) Quarter Years.	λ D_x
0	5·6886465	55	5·3561828	110	5·1301617	165	4·8832877
1	5·6553040	56	5·3523821	111	5·1258231	166	4·8786217
2	5·6397594	57	5·3485770	112	5·1214792	167	4·8739480
3	5·6257983	58	5·3447664	113	5·1171301	168	4·8692667
4	5·6128267	59	5·3409492	114	5·1127758	169	4·8645775
5	5·6002502	60	5·3371243	115	5·1084163	170	4·8598804
6	5·5895074	61	5·3332906	116	5·1040515	171	4·8551752
7	5·5802394	62	5·3294473	117	5·0996815	172	4·8504620
8	5·5720875	63	5·3255934	118	5·0953062	173	4·8457105
9	5·5646926	64	5·3217279	119	5·0909258	174	4·8410107
10	5·5576961	65	5·3178501	120	5·0865400	175	4·8362724
11	5·5507391	66	5·3139591	121	5·0821491	176	4·8315256
12	5·5434626	67	5·3100543	122	5·0777528	177	4·8267702
13	5·5372316	68	5·3061349	123	5·0733513	178	4·8220060
14	5·5312316	69	5·3022003	124	5·0689445	179	4·8172328
15	5·5254447	70	5·2982499	125	5·0645324	180	4·8124507
16	5·5198534	71	5·2942831	126	5·0601150	181	4·8076595
17	5·5144413	72	5·2902995	127	5·0556922	182	4·8028590
18	5·5091925	73	5·2862985	128	5·0512641	183	4·7980491
19	5·5040920	74	5·2822798	129	5·0468305	184	4·7932298
20	5·4991255	75	5·2782431	130	5·0423916	185	4·7884008
21	5·4942795	76	5·2741879	131	5·0379472	186	4·7835621
22	5·4895412	77	5·2701142	132	5·0334974	187	4·7787135
23	5·4848985	78	5·2660215	133	5·0290420	188	4·7738550
24	5·4803403	79	5·2619098	134	5·0245811	189	4·7689863
25	5·4758560	80	5·2577790	135	5·0201147	190	4·7641073
26	5·4714359	81	5·2536094	136	5·0156426	191	4·7592179
27	5·4670709	82	5·2494336	137	5·0111649	192	4·7543179
28	5·4627529	83	5·2452515	138	5·0066816	193	4·7494073
29	5·4584521	84	5·2410633	139	5·0021925	194	4·7444859
30	5·4541967	85	5·2368691	140	4·9976976	195	4·7395534
31	5·4499840	86	5·2326687	141	4·9931969	196	4·7346099
32	5·4458119	87	5·2284624	142	4·9886904	197	4·7296551
33	5·4416778	88	5·2242502	143	4·9841780	198	4·7246888
34	5·4375795	89	5·2200321	144	4·9796596	199	4·7197110
35	5·4335147	90	5·2158081	145	4·9751352	200	4·7147215
36	5·4294812	91	5·2115784	146	4·9706047	201	4·7097201
37	5·4254768	92	5·2073429	147	4·9660681	202	4·7047067
38	5·4214993	93	5·2031017	148	4·9615253	203	4·6996811
39	5·4175468	94	5·1988549	149	4·9569763	204	4·6946431
40	5·4136171	95	5·1946024	150	4·9524210	205	4·6895926
41	5·4097084	96	5·1903444	151	4·9478594	206	4·6845294
42	5·4058185	97	5·1860808	152	4·9432913	207	4·6794534
43	5·4019458	98	5·1818116	153	4·9387167	208	4·6743644
44	5·3980583	99	5·1775370	154	4·9341355	209	4·6692622
45	5·3942442	100	5·1732570	155	4·9295477	210	4·6641466
46	5·3904118	101	5·1689715	156	4·9249532	211	4·6590175
47	5·3865895	102	5·1646806	157	4·9203519	212	4·6538747
48	5·3827754	103	5·1603844	158	4·9157437	213	4·6487181
49	5·3789682	104	5·1560828	159	4·9111286	214	4·6435473
50	5·3751661	105	5·1517758	160	4·9065065	215	4·6383624
51	5·3713677	106	5·1474636	161	4·9018773	216	4·6331630
52	5·3675716	107	5·1431460	162	4·8972409	217	4·6278141
53	5·3637763	108	5·1388232	163	4·8925972	218	4·6224299
54	5·3599805	109	5·1344950	164	4·8879162	219	4·6170100

QUARTERLY TABLE:—FEMALES.

Logarithms of the Series D_x; Rate of Interest 3 per Cent.

FEMALES.

Age (x) Quarter Years.	λ D_x	Age (x) Quarter Years.	λ D_x	Age (x) Quarter Years.	λ D_x	Age (x) Quarter Years.	λ D_x
220	4·6115543	275	4·2306256	330	3·4589318	385	1·6566572
221	4·6060624	276	4·2214339	331	3·4378976	386	1·6085279
222	4·6005339	277	4·2121211	332	3·4165285	387	1·5597206
223	4·5949686	278	4·2026845	333	3·3948193	388	1·5102277
224	4·5893660	279	4·1931213	334	3·3727649	389	1·4600418
225	4·5837256	280	4·1834286	335	3·3503602	390	1·4091554
226	4·5780468	281	4·1736036	336	3·3276000	391	1·3575609
227	4·5723292	282	4·1636434	337	3·3044789	392	1·3052507
228	4·5665722	283	4·1535451	338	3·2809917	393	1·2522172
229	4·5607750	284	4·1433057	339	3·2571331	394	1·1984526
230	4·5549371	285	4·1329220	340	3·2328976	395	1·1439493
231	4·5490576	286	4·1223911	341	3·2082798	396	1·0886994
232	4·5431359	287	4·1117099	342	3·1832744	397	1·0326951
233	4·5371711	288	4·1008751	343	3·1578756	398	0·9759286
234	4·5311623	289	4·0898836	344	3·1320781	399	0·9183920
235	4·5251087	290	4·0787321	345	3·1058762	400	0·8600773
236	4·5190094	291	4·0674173	346	3·0792642	401	0·8009765
237	4·5128632	292	4·0559359	347	3·0522365	402	0·7410816
238	4·5066693	293	4·0442845	348	3·0247874	403	0·6803846
239	4·5004266	294	4·0324598	349	2·9969111	404	0·6188772
240	4·4941338	295	4·0204581	350	2·9686017	405	0·5565514
241	4·4877900	296	4·0082761	351	2·9398534	406	0·4933989
242	4·4813938	297	3·9959102	352	2·9106604	407	0·4294114
243	4·4749441	298	3·9833568	353	2·8810166	408	0·3645808
244	4·4684395	299	3·9706123	354	2·8509162	409	0·2988987
245	4·4618788	300	3·9576729	355	2·8203530	410	0·2323566
246	4·4552605	301	3·9445351	356	2·7893210	411	0·1649462
247	4·4485833	302	3·9311949	357	2·7578142	412	0·0966590
248	4·4418458	303	3·9176487	358	2·7258262	413	0·0274805
249	4·4350463	304	3·9038925	359	2·6933510	414	9·9574201
250	4·4281834	305	3·8899225	360	2·6603824	415	9·8864513
251	4·4212555	306	3·8757347	361	2·6269139	416	9·8145715
252	4·4142610	307	3·8613252	362	2·5929394	417	9·7417719
253	4·4071982	308	3·8466900	363	2·5584523	418	9·6680439
254	4·4000654	309	3·8318250	364	2·5234464	419	9·5933786
255	4·3928609	310	3·8167260	365	2·4879152	420	9·5177674
256	4·3855828	311	3·8013891	366	2·4518522	421	9·4412012
257	4·3782293	312	3·7858098	367	2·4152508	422	9·3636713
258	4·3707985	313	3·7699842	368	2·3781045	423	9·2851688
259	4·3632886	314	3·7539077	369	2·3404066	424	9·2056845
260	4·3556975	315	3·7375762	370	2·3021504	425	9·1252096
261	4·3480232	316	3·7209853	371	2·2633293	426	9·0437350
262	4·3402638	317	3·7041306	372	2·2239366	427	8·9612515
263	4·3324170	318	3·6870077	373	2·1839653	428	8·8777501
264	4·3244808	319	3·6696119	374	2·1434088	429	8·7932215
265	4·3164530	320	3·6519389	375	2·1022600	430	8·7076564
266	4·3083313	321	3·6339841	376	2·0605121	431	8·6210458
267	4·3001135	322	3·6157428	377	2·0181581	432	8·5333801
268	4·2917973	323	3·5972104	378	1·9751911	433	8·4446501
269	4·2833804	324	3·5783821	379	1·9316038	434	8·3548463
270	4·2748602	325	3·5592533	380	1·8873894	435	8·2639594
271	4·2662345	326	3·5398192	381	1·8425405	436	8·1719798
272	4·2575008	327	3·5200748	382	1·7970501		
273	4·2486564	328	3·5000154	383	1·7509110		
274	4·2396989	329	3·4796361	384	1·7041158		

QUARTERLY TABLE:—MALES.

The **Numbers Born,** and **Living** at each Age (l_x).

Age (x)	l_x	**Age** (x)	l_x	**Age** (x)	l_x	**Age** (x)	l_x
0	511,745	14	345,969	28	310,581	42	264,948
0¼	468,560	14¼	345,556	28¼	309,831	42¼	264,038
0½	452,597	14½	345,139	28½	309,080	42½	263,123
0¾	439,100	14¾	344,717	28¾	308,327	42¾	262,204
1	428,026	15	344,290	29	307,572	43	261,280
1¼	419,358	15¼	343,856	29¼	306,815	43¼	260,351
1½	411,999	15½	343,415	29½	306,057	43½	259,417
1¾	405,768	15¾	342,967	29¾	305,296	43¾	258,478
2	400,505	16	342,509	30	304,534	44	257,534
2¼	396,060	16¼	342,043	30¼	303,770	44¼	256,586
2½	392,294	16½	341,566	30½	303,004	44½	255,632
2¾	389,079	16¾	341,079	30¾	302,236	44¾	254,672
3	386,290	17	340,581	31	301,466	45	253,708
3¼	383,700	17¼	340,071	31¼	300,694	45¼	252,738
3½	381,312	17½	339,550	31½	299,920	45½	251,763
3¾	379,110	17¾	339,016	31¾	299,144	45¾	250,782
4	377,077	18	338,469	32	298,366	46	249,796
4¼	375,199	18¼	337,909	32¼	297,586	46¼	248,804
4½	373,461	18½	337,336	32½	296,804	46½	247,807
4¾	371,852	18¾	336,749	32¾	296,019	46¾	246,804
5	370,358	19	336,149	33	295,232	47	345,795
5¼	368,968	19¼	335,534	33¼	294,443	47¼	244,780
5½	367,672	19½	334,906	33½	293,651	47½	243,759
5¾	366,461	19¾	334,264	33¾	292,857	47¾	242,733
6	365,325	20	333,608	34	292,061	48	241,700
6¼	364,255	20¼	332,921	34¼	291,262	48¼	240,661
6½	363,244	20½	332,231	34½	290,461	48½	239,617
6¾	362,285	20¾	331,539	34¾	289,657	48¾	238,566
7	361,372	21	330,844	35	288,850	49	237,508
7¼	360,482	21¼	330,147	35¼	288,041	49¼	236,445
7½	359,635	21½	329,448	35½	287,229	49½	235,375
7¾	358,830	21¾	328,747	35¾	286,414	49¾	234,299
8	358,062	22	328,043	36	285,596	50	233,216
8¼	357,330	22¼	327,337	36¼	284,776	50¼	232,127
8½	356,632	22½	326,629	36½	283,952	50½	231,032
8¾	355,965	22¾	325,919	36¾	283,125	50¾	229,930
9	355,328	23	325,207	37	282,296	51	228,821
9¼	354,718	23¼	324,493	37¼	281,463	51¼	227,677
9½	354,133	23½	323,777	37½	280,626	51½	226,525
9¾	353,571	23¾	323,059	37¾	279,787	51¾	225,364
10	353,031	24	322,339	38	278,944	52	224,195
10¼	352,510	24¼	321,618	38¼	278,098	52¼	223,017
10½	352,007	24½	320,894	38½	277,248	52½	221,832
10¾	351,521	24¾	320,169	38¾	276,395	52¾	220,638
11	351,048	25	319,442	39	275,538	53	219,437
11¼	350,589	25¼	318,713	39¼	274,677	53¼	218,227
11½	350,141	25½	317,982	39½	273,813	53½	217,010
11¾	349,702	25¾	317,250	39¾	272,945	53¾	215,785
12	349,272	26	316,516	40	272,073	54	214,552
12¼	348,849	26¼	315,780	40¼	271,197	54¼	213,310
12½	348,431	26½	315,042	40½	270,317	54½	212,061
12¾	348,017	26¾	314,303	40¾	269,433	54¾	210,804
13	347,606	27	313,562	41	268,544	55	209,539
13¼	347,197	27¼	312,820	41¼	267,652	55¼	208,265
13½	346,789	27½	312,075	41½	266,755	55½	206,984
13¾	346,380	27¾	311,329	41¾	265,854	55¾	205,693

QUARTERLY TABLE:—MALES.

The **Numbers Born,** and **Living** at each Age (l_x).

Age (x)	l_x	**Age** (x)	l_x	**Age** (x)	l_x	**Age** (x)	l_x
56	204,395	70	114,370	84	20,711	98	220
56¼	203,088	70¼	112,454	84¼	19,704	98¼	195
56½	201,772	70½	110,533	84½	18,729	98½	172
56¾	200,447	70¾	108,606	84¾	17,787	98¾	152
57	199,114	71	106,675	85	16,877	99	134
57¼	197,771	71¼	104,740	85¼	15,998	99¼	118
57½	196,419	71½	102,802	85½	15,151	99½	103
57¾	195,057	71¾	100,862	85¾	14,335	99¾	91
58	193,686	72	98,919	86	13,549	100	79
58¼	192,305	72¼	96,976	86¼	12,795	100¼	69
58½	190,914	72½	95,033	86½	12,070	100½	60
58¾	189,513	72¾	93,090	86¾	11,375	100¾	52
59	188,102	73	91,149	87	10,709	101	46
59¼	186,680	73¼	89,210	87¼	10,071	101¼	39
59½	185,248	73½	87,274	87½	9,462	101½	34
59¾	183,805	73¾	85,342	87¾	8,880	101¾	29
60	182,350	74	83,416	88	8,325	102	25
60¼	180,885	74¼	81,495	88¼	7,796	102¼	22
60½	179,409	74½	79,581	88½	7,292	102½	19
60¾	177,920	74¾	77,675	88¾	6,814	102¾	16
61	176,421	75	75,777	89	6,360	103	14
61¼	174,909	75¼	73,889	89¼	5,929	103¼	12
61½	173,386	75½	72,012	89½	5,521	103½	10
61¾	171,851	75¾	70,147	89¾	5,135	103¾	8
62	170,303	76	68,294	90	4,770	104	7
62¼	168,744	76¼	66,454	90¼	4,426	104¼	6
62½	167,171	76½	64,629	90½	4,102	104½	5
62¾	165,587	76¾	62,819	90¾	3,797	104¾	4
63	163,989	77	61,026	91	3,510	105	4
63¼	162,380	77¼	59,250	91¼	3,241	105¼	3
63½	160,757	77½	57,493	91½	2,988	105½	3
63¾	159,122	77¾	55,754	91¾	2,752	105¾	2
64	157,474	78	54,036	92	2,531	106	2
64¼	155,813	78¼	52,339	92¼	2,325	106¼	1
64½	154,139	78½	50,663	92½	2,132	106½	1
64¾	152,453	78¾	49,010	92¾	1,953	106¾	1
65	150,754	79	47,381	93	1,787	107	1
65¼	149,043	79¼	45,776	93¼	1,632	107¼	1
65½	147,319	79½	44,196	93½	1,489	107½	1
65¾	145,582	79¾	42,642	93¾	1,357	107¾	...
66	143,833	80	41,115	94	1,234		
66¼	142,072	80¼	39,614	94¼	1,121		
66½	140,299	80½	38,142	94½	1,017		
66¾	138,514	80¾	36,698	94¾	921		
67	136,718	81	35,283	95	833		
67¼	134,910	81¼	33,897	95¼	752		
67½	133,091	81½	32,542	95½	678		
67¾	131,261	81¾	31,217	95¾	610		
68	129,421	82	29,922	96	548		
68¼	127,571	82¼	28,659	96¼	492		
68½	125,711	82½	27,428	96½	441		
68¾	123,841	82¾	26,228	96¾	394		
69	121,963	83	25,060	97	352		
69¼	120,076	83¼	23,924	97¼	314		
69½	118,181	83½	22,821	97½	279		
69¾	116,279	83¾	21,749	97¾	248		

QUARTERLY TABLE:—FEMALES.

The **Numbers Born,** and **Living** at each Age (l_x).

Age (x)	l_x	Age (x)	l_x	Age (x)	l_x	Age (x)	l_x
0	488,255	14	342,062	28	305,440	42	259,678
0¼	455,564	14¼	341,621	28¼	304,664	42¼	258,816
0½	442,843	14½	341,177	28½	303,887	42½	257,952
0¾	432,050	14¾	340,728	28¾	303,108	42¾	257,087
1	422,481	15	340,273	29	302,328	43	256,219
1¼	413,500	15¼	339,812	29¼	301,546	43¼	255,349
1½	406,422	15½	339,344	29½	300,762	43½	254,478
1¾	400,825	15¾	338,869	29¾	299,977	43¾	253,605
2	396,322	16	338,385	30	299,190	44	252,729
2¼	392,553	16¼	337,893	30¼	298,401	44¼	251,852
2½	389,177	16½	337,390	30½	297,611	44½	250,972
2¾	385,864	16¾	336,878	30¾	296,820	44¾	250,091
3	382,299	17	336,356	31	296,027	45	249,207
3¼	379,680	17¼	335,822	31¼	295,233	45¼	248,322
3½	377,279	17½	335,277	31½	294,437	45½	247,434
3¾	375,077	17¾	334,720	31¾	293,639	45¾	246,544
4	373,056	18	334,151	32	292,840	46	245,652
4¼	371,199	18¼	333,570	32¼	292,040	46¼	244,758
4½	369,491	18½	332,977	32½	291,238	46½	243,861
4¾	367,915	18¾	332,370	32¾	290,435	46¾	242,962
5	366,460	19	331,751	33	289,631	47	242,061
5¼	365,112	19¼	331,118	33¼	288,825	47¼	241,158
5½	363,858	19½	330,473	33½	288,017	47½	240,252
5¾	362,689	19¾	329,814	33¾	287,208	47¾	239,344
6	361,594	20	329,142	34	286,398	48	238,434
6¼	360,564	20¼	328,442	34¼	285,586	48¼	237,521
6½	359,590	20½	327,739	34½	284,773	48½	236,606
6¾	358,664	20¾	327,033	34¾	283,959	48¾	235,689
7	357,779	21	326,323	35	283,143	49	234,769
7¼	356,910	21¼	325,611	35¼	282,325	49¼	233,846
7½	356,081	21½	324,895	35½	281,506	49½	232,922
7¾	355,288	21¾	324,177	35¾	280,686	49¾	231,994
8	354,530	22	323,456	36	279,864	50	231,064
8¼	353,805	22¼	322,732	36¼	279,041	50¼	230,132
8½	353,111	22½	322,005	36½	278,216	50½	229,196
8¾	352,445	22¾	321,276	36¾	277,390	50¾	228,259
9	351,806	23	320,544	37	276,563	51	227,318
9¼	351,191	23¼	319,810	37¼	275,734	51¼	226,375
9½	350,600	23½	319,073	37½	274,903	51½	225,430
9¾	350,029	23¾	318,334	37¾	274,071	51¾	224,481
10	349,478	24	317,592	38	273,237	52	223,530
10¼	348,944	24¼	316,848	38¼	272,402	52¼	222,576
10½	348,426	24½	316,102	38½	271,565	52½	221,620
10¾	347,923	24¾	315,353	38¾	270,727	52¾	220,660
11	347,433	25	314,603	39	269,887	53	219,698
11¼	346,954	25¼	313,850	39¼	269,045	53¼	218,733
11½	346,485	25½	313,095	39½	268,202	53½	217,766
11¾	346,025	25¾	312,338	39¾	267,357	53¾	216,795
12	345,572	26	311,579	40	266,511	54	215,822
12¼	345,125	26¼	310,818	40¼	265,663	54¼	214,779
12½	344,682	26½	310,056	40½	264,813	54½	213,723
12¾	344,243	26¾	309,291	40¾	263,962	54¾	212,656
13	343,807	27	308,524	41	263,109	55	211,576
13¼	343,371	27¼	307,756	41¼	262,254	55¼	210,484
13½	342,936	27½	306,985	41½	261,397	55½	209,380
13¾	342,500	27¾	306,213	41¾	260,539	55¾	208,265

QUARTERLY TABLE:—FEMALES.

The **Numbers Born,** and **Living** at each Age (l_x).

Age (x)	l_x	Age (x)	l_x	Age (x)	l_x	Age (x)	l_x
56	207,137	70	123,607	84	26,178	98	378
56¼	205,998	70¼	121,749	84¼	25,007	98¼	337
56½	204,847	70½	119,881	84½	23,868	98½	300
56¾	203,684	70¾	118,004	84¾	22,762	98¾	267
57	202,509	71	116,118	85	21,688	99	236
57¼	201,323	71¼	114,225	85¼	20,646	99¼	209
57½	200,124	71½	112,325	85½	19,637	99½	185
57¾	198,914	71¾	110,418	85¾	18,661	99¾	163
58	197,692	72	108,505	86	17,716	100	144
58¼	196,458	72¼	106,587	86¼	16,804	100¼	127
58½	195,211	72½	104,664	86½	15,924	100½	111
58¾	193,953	72¾	102,737	86¾	15,075	100¾	97
59	192,683	73	100,807	87	14,258	101	85
59¼	191,400	73¼	98,875	87¼	13,472	101¼	74
59½	190,105	73½	96,941	87½	12,717	101½	65
59¾	188,797	73¾	95,006	87¾	11,991	101¾	56
60	187,477	74	93,071	88	11,296	102	49
60¼	186,144	74¼	91,136	88¼	10,630	102¼	42
60½	184,798	74½	89,204	88½	9,992	102½	37
60¾	183,439	74¾	87,274	88¾	9,383	102¾	32
61	182,068	75	85,347	89	8,802	103	27
61¼	180,683	75¼	83,425	89¼	8,247	103¼	23
61½	179,285	75½	81,508	89½	7,719	103½	20
61¾	177,874	75¾	79,598	89¾	7,216	103¾	17
62	176,449	76	77,694	90	6,739	104	15
62¼	175,011	76¼	75,799	90¼	6,286	104¼	12
62½	173,559	76½	73,913	90½	5,857	104½	11
62¾	172,093	76¾	72,037	90¾	5,450	104¾	9
63	170,614	77	70,173	91	5,066	105	8
63¼	169,121	77¼	68,320	91¼	4,703	105¼	6
63½	167,614	77½	66,480	91½	4,361	105½	5
63¾	166,092	77¾	64,655	91¾	4,038	105¾	5
64	164,557	78	62,844	92	3,735	106	4
64¼	163,008	78¼	61,050	92¼	3,450	106¼	3
64½	161,444	78½	59,273	92½	3,183	106½	3
64¾	159,867	78¾	57,513	92¾	2,933	106¾	2
65	158,275	79	55,773	93	2,698	107	2
65¼	156,669	79¼	54,052	93¼	2,480	107¼	2
65½	155,049	79½	52,352	93½	2,275	107½	1
65¾	153,414	79¾	50,674	93¾	2,085	107¾	1
66	151,766	80	49,018	94	1,908	108	1
66¼	150,104	80¼	47,386	94¼	1,744	108¼	1
66½	148,428	80½	45,777	94½	1,592	108½	1
66¾	146,738	80¾	44,194	94¾	1,450	108¾	...
67	145,035	81	42,636	95	1,320		
67¼	143,318	81¼	41,105	95¼	1,199		
67½	141,588	81½	39,601	95½	1,088		
67¾	139,844	81¾	38,125	95¾	986		
68	138,088	82	36,677	96	892		
68¼	136,319	82¼	35,258	96¼	805		
68½	134,538	82½	33,869	96½	726		
68¾	132,744	82¾	32,510	96¾	654		
69	130,939	83	31,181	97	588		
69¼	129,122	83¼	29,883	97¼	528		
69½	127,295	83½	28,616	97½	473		
69¾	125,456	83¾	27,381	97¾	423		

QUARTERLY TABLE :—MALES. Interest 3 per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	511,745	38,110,610	7·5810457	14	227,675	20,770,892	7·3174553
0¼	465,072	37,598,865	7·5751751	14¼	225,710	20,543,217	7·3126681
0½	445,885	37,133,793	7·5697694	14½	223,759	20,317,507	7·3078703
0¾	429,367	36,687,908	7·5645228	14¾	221,822	20,093,748	7·3030599
1	415,422	36,258,541	7·5594098	15	219,898	19,871,926	7·2982394
1¼	403,980	35,843,119	7·5544056	15¼	217,986	19,652,028	7·2934068
1½	393,936	35,439,139	7·5494827	15½	216,086	19,434,042	7·2885622
1¾	385,091	35,045,203	7·5446286	15¾	214,197	19,217,956	7·2837082
2	377,266	34,660,112	7·5398299	16	212,319	19,003,759	7·2788404
2¼	370,301	34,282,846	7·5350763	16¼	210,451	18,791,440	7·2739591
2½	364,050	33,912,545	7·5303598	16½	208,594	18,580,989	7·2690691
2¾	358,378	33,548,495	7·5256731	16¾	206,746	18,372,395	7·2641659
3	353,161	33,190,117	7·5210086	17	204,907	18,165,649	7·2592497
3¼	348,182	32,836,956	7·5163635	17¼	203,077	17,960,742	7·2543232
3½	343,439	32,488,774	7·5117336	17½	201,256	17,757,665	7·2493868
3¾	338,914	32,145,335	7·5071175	17¾	199,444	17,556,409	7·2444355
4	334,587	31,806,421	7·5025145	18	197,640	17,356,965	7·2394747
4¼	330,442	31,471,834	7·4979215	18¼	195,844	17,159,325	7·2344996
4½	326,464	31,141,392	7·4933382	18½	194,057	16,963,481	7·2295155
4¾	322,637	30,814,928	7·4887608	18¾	192,277	16,769,424	7·2245176
5	318,948	30,492,291	7·4841902	19	190,505	16,577,147	7·2195085
5¼	315,386	30,173,343	7·4796228	19¼	188,742	16,386,642	7·2144889
5½	311,939	29,857,957	7·4750607	19½	186,986	16,197,900	7·2094587
5¾	308,597	29,546,018	7·4704987	19¾	185,238	16,010,914	7·2044158
6	305,350	29,237,421	7·4659388	20	183,498	15,825,676	7·1993630
6¼	302,189	28,932,071	7·4613800	20¼	181,757	15,642,178	7·1942978
6½	299,107	28,629,882	7·4568198	20½	180,030	15,460,421	7·1892207
6¾	296,097	28,330,775	7·4522588	20¾	178,318	15,280,391	7·1841348
7	293,152	28,034,678	7·4476960	21	176,620	15,102,073	7·1790374
7¼	290,253	27,741,526	7·4431300	21¼	174,936	14,925,453	7·1739289
7½	287,416	27,451,273	7·4385629	21½	173,266	14,750,517	7·1688068
7¾	284,637	27,163,857	7·4339921	21¾	171,610	14,577,251	7·1636771
8	281,914	26,879,220	7·4294163	22	169,967	14,405,641	7·1585314
8¼	279,243	26,597,306	7·4248376	22¼	168,339	14,235,674	7·1533789
8½	276,623	26,318,063	7·4202546	22½	166,725	14,067,335	7·1482108
8¾	274,051	26,041,440	7·4156643	22¾	165,124	13,900,610	7·1430335
9	271,524	25,767,389	7·4110706	23	163,537	13,735,486	7·1378445
9¼	269,039	25,495,865	7·4064704	23¼	161,963	13,571,949	7·1326407
9½	266,596	25,226,826	7·4018622	23½	160,402	13,409,986	7·1274288
9¾	264,192	24,960,230	7·3972481	23¾	158,855	13,249,584	7·1222028
10	261,825	24,696,038	7·3926266	24	157,321	13,090,729	7·1169628
10¼	259,492	24,434,213	7·3879981	24¼	155,801	12,933,408	7·1117127
10½	257,193	24,174,721	7·3833611	24½	154,293	12,777,607	7·1064493
10¾	254,926	23,917,528	7·3787158	24¾	152,798	12,623,314	7·1011729
11	252,688	23,662,602	7·3740625	25	151,317	12,470,516	7·0958840
11¼	250,479	23,409,914	7·3693996	25¼	149,847	12,319,199	7·0905826
11½	248,296	23,159,435	7·3647273	25½	148,391	12,169,352	7·0852692
11¾	246,139	22,911,139	7·3600459	25¾	146,947	12,020,961	7·0799406
12	244,006	22,665,000	7·3553557	26	145,516	11,874,014	7·0745970
12¼	241,896	22,420,994	7·3506550	26¼	144,097	11,728,498	7·0692426
12½	239,808	22,179,098	7·3459440	26½	142,690	11,584,401	7·0638735
12¾	237,740	21,939,290	7·3412227	26¾	141,295	11,441,711	7·0584905
13	235,692	21,701,550	7·3364918	27	139,913	11,300,416	7·0530938
13¼	233,662	21,465,858	7·3317491	27¼	138,542	11,160,503	7·0476837
13½	231,650	21,232,196	7·3269950	27½	137,184	11,021,961	7·0422604
13¾	229,654	21,000,546	7·3222297	27¾	135,837	10,884,777	7·0368204

QUARTERLY TABLE:—MALES. Interest 3 per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
28	134,502	10,748,940	7·0313642	42	75,508	4,970,978	6·6964420
28¼	133,179	10,614,438	7·0258955	42¼	74,688	4,895,470	6·6897944
28½	131,866	10,481,259	7·0204152	42½	73,875	4,820,782	6·6831173
28¾	130,566	10,349,393	7·0149152	42¾	73,069	4,746,907	6·6764110
29	129,277	10,218,827	7·0093999	43	72,270	4,673,838	6·6696738
29¼	127,999	10,089,550	7·0038740	43¼	71,477	4,601,568	6·6629061
29½	126,732	9,961,551	6·9983269	43½	70,690	4,530,091	6·6561068
29¾	125,476	9,834,819	6·9927664	43¾	69,910	4,459,401	6·6492764
30	124,231	9,709,343	6·9871897	44	69,136	4,389,491	6·6424141
30¼	122,997	9,585,112	6·9815971	44¼	68,369	4,320,355	6·6355200
30½	121,773	9,462,115	6·9759884	44½	67,607	4,251,986	6·6285923
30¾	120,560	9,340,342	6·9703627	44¾	66,852	4,184.379	6·6216311
31	119,358	9,219,782	6·9647206	45	66,103	4,117,527	6·6146368
31¼	118,166	9,100,424	6·9590615	45¼	65,361	4,051,424	6·6076072
31½	116,985	8,982,258	6·9533856	45½	64,624	3,986,063	6·6005438
31¾	115,813	8,865,273	6·9476919	45¾	63,893	3,921,439	6·5934455
32	114,652	8,749,460	6·9419812	46	63,168	3,857,546	6·5863116
32¼	113,501	8,634,808	6·9362528	46¼	62,449	3,794.378	6·5791408
32½	112,360	8,521,307	6·9305064	46½	61,735	3,731.929	6·5719335
32¾	111,229	8,408,947	6·9247418	46¾	61,028	3,670,194	6·5646885
33	110,107	8,297,718	6·9189588	47	60,326	3,609.166	6·5574073
33¼	108,996	8,187,611	6·9131571	47¼	59,629	3,548.840	6·5500864
33½	107,893	8,078,615	6·9073372	47½	58,939	3,489,211	6·5427271
33¾	106,801	7,970,722	6·9014976	47¾	58,254	3,430,272	6·5353283
34	105,717	7,863,921	6·8956391	48	57,574	3,372,018	6·5278902
34¼	104,643	7,758,204	6·8897610	48¼	56,900	3,314,444	6·5204101
34½	103,579	7,653,561	6·8838635	48½	56,231	3,257,544	6·5128898
34¾	102,523	7,549,982	6·8779458	48¾	55,568	3,201,313	6·5053278
35	101,476	7,447,459	6·8720082	49	54,910	3,145,745	6·4977242
35¼	100,439	7,345,983	6·8660497	49¼	54,257	3,090,835	6·4900765
35½	99,410	7,245,544	6·8600708	49½	53,609	3,036,578	6·4823847
35¾	98,390	7,146,134	6·8540709	49¾	52,967	2,982,969	6·4746489
36	97,379	7,047,744	6·8480499	50	52,330	2,930,002	6·4668676
36¼	96,376	6,950,365	6·8420079	50¼	51,698	2,877,672	6·4590410
36½	95,382	6,853,989	6·8359435	50½	51,071	2,825,974	6·4511676
36¾	94,396	6,758,607	6·8298574	50¾	50,449	2,774,903	6·4432473
37	93,419	6,664,211	6·8237487	51	49,832	2,724,454	6·4352789
37¼	92,450	6,570,792	6·8176175	51¼	49,213	2,674,622	6·4272621
37½	91,489	6,478,342	6·8114638	51½	48,600	2,625,409	6·4191972
37¾	90,537	6,386,853	6·8052867	51¾	47,991	2,576,809	6·4110824
38	89,592	6,296,316	6·7990868	52	47,386	2,528,818	6·4029179
38¼	88,655	6,206,724	6·7928622	52¼	46,787	2,481,432	6·3947021
38½	87,726	6,118,069	6·7866145	52½	46,192	2,434,645	6·3864366
38¾	86,805	6,030,343	6·7803418	52¾	45,601	2,388,453	6·3781162
39	85,892	5,943.538	6·7740452	53	45,015	2,342,852	6·3697445
39¼	84,986	5,857,646	6·7677234	53¼	44,434	2,297,837	6·3613198
39½	84,088	5,772,660	6·7613760	53½	43,857	2,253,403	6·3528383
39¾	83,198	5,688,572	6·7550031	53¾	43,285	2,209,546	6·3443039
40	82,315	5,605,374	6·7486043	54	42,717	2,166,261	6·3357106
40¼	81,439	5,523,059	6·7421797	54¼	42,154	2,123,544	6·3270605
40½	80,570	5,441,620	6·7357282	54½	41,595	2,081,390	6·3183535
40¾	79,709	5,361,050	6·7292499	54¾	41,040	2,039,795	6·3095876
41	78,855	5,281,341	6·7227441	55	40,490	1,998.755	6·3007606
41¼	78,007	5,202,486	6·7162113	55¼	39,945	1,958,265	6·2918725
41½	77,167	5,124,479	6·7096498	55½	39,403	1,918,320	6·2829210
41¾	76,334	5,047,312	6·7030600	55¾	38,866	1,878,917	6·2739083

QUARTERLY TABLE:—MALES. Interest 3 per Cent.

Age (x)	D_x	N_x	λ N_x	Age (x)	D_x	N_x	λ N_x
56	38,333	1,840,051	6·2648296	70	14,116	407,341	5·6099582
56¼	37,805	1,801,718	6·2556873	70¼	13,776	393,225	5·5946411
56½	37,280	1,763,913	6·2464765	70½	13,440	379,449	5·5791535
56¾	36,760	1,726,633	6·2371993	70¾	13,107	366,009	5·5634918
57	36,243	1,689,873	6·2278533	71	12,778	352,902	5·5476542
57¼	35,731	1,653,630	6·2184384	71¼	12,453	340,124	5·5316373
57½	35,222	1,617,899	6·2089517	71½	12,132	327,671	5·5154380
57¾	34,718	1,582,677	6·1993931	71¾	11,814	315,539	5·4990530
58	34,217	1,547,959	6·1897598	72	11,500	303,725	5·4824806
58¼	33,720	1,513,742	6·1800513	72¼	11,190	292,225	5·4657174
58½	33,227	1,480,022	6·1702676	72½	10,884	281,035	5·4487604
58¾	32,738	1,446,795	6·1604085	72¾	10,583	270,151	5·4316066
59	32,252	1,414,057	6·1504678	73	10,285	259,568	5·4142512
59¼	31,770	1,381,805	6·1404483	73¼	9,991·0	249,282·9	5·3966927
59½	31,292	1,350,035	6·1303466	73½	9,701·5	239,291·9	5·3789281
59¾	30,817	1,318,743	6·1201592	73¾	9,416·1	229,590·4	5·3609530
60	30,345	1,287,926	6·1098922	74	9,135·0	220,174·3	5·3427660
60¼	29,878	1,257,581	6·0995356	74¼	8,858·3	211,039·3	5·3243627
60½	29,413	1,227,703	6·0890923	74½	8,585·8	202,181·0	5·3057404
60¾	28,952	1,198,290	6·0785620	74¾	8,317·8	193,595·2	5·2868942
61	28,494	1,169,338	6·0679408	75	8,054·2	185,277·4	5·2678215
61¼	28,040	1,140,844	6·0572247	75¼	7,795·1	177,223·2	5·2485201
61½	27,589	1,112,804	6·0464171	75½	7,540·5	169,428·1	5·2289852
61¾	27,141	1,085,215	6·0355178	75¾	7,290·5	161,887·6	5·2092146
62	26,696	1,058,074	6·0245145	76	7,045·0	154,597·1	5·1892011
62¼	26,255	1,031,378	6·0134187	76¼	6,804·2	147,552·1	5·1689451
62½	25,817	1,005,123	6·0022180	76½	6,568·1	140,747·9	5·1484422
62¾	25,381	979,306	5·9909184	76¾	6,336·7	134,179·8	5·1276878
63	24,950	953,925	5·9795143	77	6,110·0	127,843·1	5·1066770
63¼	24,521	928,975	5·9680041	77¼	5,888·0	121,733·1	5·0854083
63½	24,095	904,454	5·9563865	77½	5,670·8	115,845·1	5·0638773
63¾	23,672	880,359	5·9446598	77¾	5,458·4	110,174·3	5·0420791
64	23,253	856,687	5·9328222	78	5,250·8	104,715·9	5·0200131
64¼	22,836	833,434	5·9208712	78¼	5,048·0	99,465·1	4·9976707
64½	22,423	810,598	5·9088055	78½	4,850·0	94,417·1	4·9750507
64¾	22,012	788,175	5·8966227	78¾	4,656·9	89,567·1	4·9521485
65	21,605	766,163	5·8843212	79	4,468·6	84,910·2	4·9289598
65¼	21,201	744,558	5·8718985	79¼	4,285·1	80,441·6	4·9054807
65½	20,800	723,357	5·8593527	79½	4,106·4	76,156·5	4·8817070
65¾	20,401	702,557	5·8466815	79¾	3,932·5	72,050·1	4·8576346
66	20,006	682,156	5·8338837	80	3,763·4	68,117·6	4·8332593
66¼	19,614	662,150	5·8209564	80¼	3,599·1	64,354·2	4·8085769
66½	19,225	642,536	5·8078975	80½	3,439·5	60,755·1	4·7835827
66¾	18,839	623,311	5·7947048	80¾	3,284·6	57,315·6	4·7582729
67	18,457	604,472	5·7813762	81	3,134·5	54,031·0	4·7326430
67¼	18,077	586,015	5·7679087	81¼	2,989·0	50,896·5	4·7066880
67½	17,700	567,938	5·7543010	81½	2,848·1	47,907·5	4·6804035
67¾	17,327	550,238	5·7405506	81¾	2,711·8	45,059·4	4·6537854
68	16,957	532,911	5·7266547	82	2,580·0	42,347·6	4·6268288
68¼	16,590	515,954	5·7126110	82¼	2,452·7	39,767·6	4·5995294
68½	16,227	499,364	5·6984172	82½	2,329·8	37,314·9	4·5718822
68¾	15,866	483,137	5·6840703	82¾	2,211·3	34,985·1	4·5438831
69	15,509	467,271	5·6695688	83	2,097·1	32,773·8	4·5155268
69¼	15,156	451,762	5·6549097	83¼	1,987·2	30,676·7	4·4868086
69½	14,806	436,606	5·6400897	83½	1,881·4	28,689·5	4·4577230
69¾	14,459	421,800	5·6251066	83¾	1,779·7	26,808·1	4·4282660

QUARTERLY TABLE:—MALES. Interest 3 per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
84	1,682·1	25,028·4	4·3984331	97	19·396	155·063	2·1905082
84¼	1,588·4	23,346·3	4·3682181	97¼	17·164	135·667	2·1324742
84½	1,498·6	21,757·9	4·3376170	97½	15·163	118·503	2·0737294
84¾	1,412·6	20,259·3	4·3066244	97¾	13·374	103·340	2·0142685
85	1,330·4	18,846·7	4·2752353	98	11·775	89·966	1·9540784
85¼	1,251·7	17,516·3	4·2434423	98¼	10·350	78·191	1·8931568
85½	1,176·6	16,264·6	4·2112434	98½	9·0815	67·8411	1·8314928
85¾	1,104·9	15,088·0	4·1786317	98¾	7·9545	58·7596	1·7690788
86	1,036·6	13,983·1	4·1456035	99	6·9552	50·8051	1·7059074
86¼	971·60	12,946·46	4·1121524	99¼	6·0705	43·8499	1·6419686
86½	909·74	11,974·86	4·0782720	99½	5·2888	37·7794	1·5772551
86¾	850·96	11,065·12	4·0439553	99¾	4·5994	32·4906	1·5117577
87	795·17	10,214·16	4·0092044	100	3·9925	27·8912	1·4454672
87¼	742·27	9,418·99	3·9740043	100¼	3·4592	23·8987	1·3783743
87½	692·16	8,676·72	3·9383556	100½	2·9916	20·4395	1·3104703
87¾	644·75	7,984·56	3·9022510	100¾	2·5822	17·4479	1·2417432
88	599·94	7,339·81	3·8656848	101	2·2247	14·8657	1·1721853
88¼	557·64	6,739·87	3·8286516	101¼	1·9129	12·6410	1·1017814
88½	517·75	6,182·23	3·7911452	101½	1·6416	10·7281	1·0305229
88¾	480·18	5,664·48	3·7531601	101¾	1·4060	9·0865	0·9583966
89	444·83	5,184·30	3·7146901	102	1·2019	7·6805	0·8853895
89¼	411·61	4,739·47	3·6757298	102¼	1·0253	6·4786	0·8114812
89½	380·43	4,327·86	3·6362732	102½	·8729	5·4533	0·7366594
89¾	351·20	3,947·43	3·5963144	102¾	·7416	4·5804	0·6609034
90	323·84	3,596·23	3·5558474	103	·6288	3·8388	0·5841955
90¼	298·24	3,272·39	3·5148651	103¼	·5320	3·2100	0·5065050
90½	274·34	2,974·15	3·4733629	103½	·4492	2·6780	0·4278106
90¾	252·04	2,699·81	3·4313332	103¾	·3785	2·2288	0·3480711
91	231·26	2,447·77	3·3887706	104	·3182	1·8503	0·2672421
91¼	211·93	2,216·51	3·3456697	104¼	·2669	1·5321	0·1852871
91½	193·97	2,004·58	3·3020234	104½	·2234	1·2652	0·1021592
91¾	177·30	1,810·61	3·2578249	104¾	·1866	1·0418	0·0177844
92	161·85	1,633·31	3·2130687	105	·1555	·8552	$\bar{1}$·9320677
92¼	147·56	1,471·46	3·1677485	105¼	·1293	·6997	$\bar{1}$·8449119
92½	134·34	1,323·90	3·1218552	105½	·1073	·5704	$\bar{1}$·7561795
92¾	122·15	1,189·56	3·0753864	105¾	·0888	·4631	$\bar{1}$·6656748
93	110·91	1,067·41	3·0283313	106	·0733	·3743	$\bar{1}$·5732198
93¼	100·56	956·50	2·9806850	106¼	·0604	·3010	$\bar{1}$·4785665
93½	91·052	855·941	2·9324438	106½	·0497	·2406	$\bar{1}$·3812956
93¾	82·327	764·889	2·8835984	106¾	·0407	·1909	$\bar{1}$·2808059
94	74·331	682·562	2·8341421	107	·0333	·1502	$\bar{1}$·1766699
94¼	67·015	608·231	2·7840685	107¼	·0272	·1169	$\bar{1}$·0678145
94½	60·331	541·216	2·7333706	107½	·0221	·0897	$\bar{2}$·9527924
94¾	54·233	480·885	2·6820412	107¾	·0180	·0676	$\bar{2}$·8299467
95	48·679	426·652	2·6300737	108	·0146	·0496	$\bar{2}$·6954817
95¼	43·627	377·973	2·5774608	108¼	·0118	·0350	$\bar{2}$·5440680
95½	39·040	334·346	2·5241961	108½	·0095	·0232	$\bar{2}$·3654880
95¾	34·882	295·306	2·4702723	108¾	·0076	·0137	$\bar{2}$·1367206
96	31·117	260·424	2·4156810	109	·0061	·0061	$\bar{3}$·7853298
96¼	27·716	229·307	2·3604173				
96½	24·646	201·591	2·3044712				
96¾	21·882	176·945	2·2478383				

QUARTERLY TABLE:—FEMALES. Interest 3 per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
0	488,255	37,727,582	7·5766592	14	225,103	20,603,185	7·3139347
0¼	452,172	37,239,327	7·5710015	14¼	223,140	20,378,082	7·3091637
0½	436,274	36,787,155	7·5656968	14½	221,190	20,154,942	7·3043807
0¾	422,472	36,350,881	7·5605152	14¾	219,255	19,933,752	7·2995901
1	410,040	35,928,409	7·5554378	15	217,332	19,714,497	7·2947858
1¼	398,337	35,518,369	7·5504534	15¼	215,422	19,497,165	7·2899723
1½	388,604	35,120,032	7·5455545	15½	213,524	19,281,743	7·2851454
1¾	380,399	34,731,428	7·5407223	15¾	211,638	19,068,219	7·2803097
2	373,325	34,351,029	7·5359394	16	209,763	18,856,581	7·2754634
2¼	367,022	33,977,704	7·5311940	16¼	207,898	18,646,818	7·2706043
2½	361,157	33,610,682	7·5264775	16½	206,044	18,438,920	7·2657350
2¾	355,418	33,249,525	7·5217851	16¾	204,199	18,232,876	7·2608557
3	349,512	32,894,107	7·5171180	17	202,365	18,028,677	7·2559644
3¼	344,534	32,544,595	7·5124789	17¼	200,540	17,826,312	7·2510612
3½	339,806	32,200,061	7·5078573	17½	198,724	17,625,772	7·2461489
3¾	335,309	31,860,255	7·5032499	17¾	196,917	17,427,048	7·2412226
4	331,019	31,524,946	7·4986537	18	195,119	17,230,131	7·2362878
4¼	326,920	31,193,927	7·4940697	18¼	193,330	17,035,012	7·2313421
4½	322,993	30,867,007	7·4894944	18½	191,549	16,841,682	7·2263860
4¾	319,221	30,544,014	7·4849259	18¾	189,777	16,650,133	7·2214168
5	315,592	30,224,793	7·4803634	19	188,013	16,460,356	7·2164404
5¼	312,090	29,909,201	7·4758048	19¼	186,258	16,272,343	7·2114489
5½	308,703	29,597,111	7·4712492	19½	184,511	16,086,085	7·2064508
5¾	305,421	29,288,408	7·4666956	19¾	182,772	15,901,574	7·2014408
6	302,232	28,982,987	7·4621433	20	181,042	15,718,802	7·1964194
6¼	299,127	28,680,755	7·4575913	20¼	179,312	15,537,760	7·1913895
6½	296,098	28,381,628	7·4530369	20½	177,596	15,358,448	7·1863460
6¾	293,137	28,085,530	7·4484822	20¾	175,894	15,180,852	7·1812975
7	290,237	27,792,393	7·4439260	21	174,206	15,004,958	7·1762360
7¼	287,377	27,502,156	7·4393675	21¼	172,532	14,830,752	7·1711646
7½	284,575	27,214,779	7·4348051	21½	170,871	14,658,220	7·1660806
7¾	281,828	26,930,204	7·4302396	21¾	169,224	14,487,349	7·1609875
8	279,133	26,648,376	7·4256711	22	167,591	14,318,125	7·1558854
8¼	276,489	26,369,243	7·4210970	22¼	165,971	14,150,534	7·1507718
8½	273,892	26,092,754	7·4165207	22½	164,365	13,984,563	7·1456501
8¾	271,341	25,818,862	7·4119377	22¾	162,771	13,820,198	7·1405143
9	268,832	25,547,521	7·4073484	23	161,192	13,657,427	7·1353680
9¼	266,365	25,278,689	7·4027547	23¼	159,625	13,496,235	7·1302115
9½	263,936	25,012,324	7·3981536	23½	158,072	13,336,610	7·1250452
9¾	261,545	24,748,388	7·3935471	23¾	156,532	13,178,538	7·1198660
10	259,189	24,486,843	7·3889320	24	155,005	13,022,006	7·1146777
10¼	256,867	24,227,654	7·3843122	24¼	153,490	12,867,001	7·1094773
10½	254,577	23,970,787	7·3796826	24½	151,989	12,713,511	7·1042651
10¾	252,317	23,716,210	7·3750451	24¾	150,500	12,561,522	7·0990416
11	250,085	23,463,893	7·3704002	25	149,024	12,411,022	7·0938068
11¼	247,882	23,213,808	7·3657463	25¼	147,561	12,261,998	7·0885613
11½	245,704	22,965,926	7·3610835	25½	146,110	12,114,437	7·0833020
11¾	243,551	22,720,222	7·3564121	25¾	144,672	11,968,327	7·0780325
12	241,421	22,476,671	7·3517325	26	143,246	11,823,655	7·0727534
12¼	239,314	22,235,250	7·3470430	26¼	141,833	11,680,409	7·0674577
12½	237,228	21,995,936	7·3423417	26½	140,431	11,538,576	7·0621531
12¾	235,162	21,758,708	7·3376329	26¾	139,042	11,398,145	7·0568325
13	233,116	21,523,546	7·3329129	27	137,665	11,259,103	7·0515037
13¼	231,087	21,290,430	7·3281839	27¼	136,300	11,121,438	7·0461594
13½	229,076	21,059,343	7·3234439	27½	134,946	10,985,138	7·0408041
13¾	227,082	20,830,267	7·3186955	27¾	133,605	10,850,192	7·0354377

QUARTERLY TABLE:—FEMALES. Interest 3 per Cent.

Age (x)	D_x	N_x	λ N_x	Age (x)	D_x	N_x	λ N_x
28	132,275	10,716,587	7·0300570	42	74,006	5,048,593	6·7031701
28¼	130,957	10,584,312	7·0246621	42¼	73,211	4,974,587	6·6967573
28½	129,651	10,453,355	7·0192576	42½	72,424	4,901,376	6·6903183
28¾	128,356	10,323,704	7·0138354	42¾	71,643	4,828,952	6·6838527
29	127,072	10,195,348	7·0084000	43	70,870	4,757,309	6·6773614
29¼	125,800	10,068,276	7·0029561	43¼	70,104	4,686,439	6·6708431
29½	124,539	9,942,476	6·9974947	43½	69,344	4,616,335	6·6642978
29¾	123,289	9,817,937	6·9920204	43¾	68,592	4,546,991	6·6577240
30	122,051	9,694,648	6·9865322	44	67,846	4,478,399	6·6511229
30¼	120,823	9,572,597	6·9810299	44¼	67,107	4,410,553	6·6444928
30½	119,606	9,451,774	6·9755131	44½	66,375	4,343,446	6·6378348
30¾	118,400	9,332,168	6·9699826	44¾	65,650	4,277,071	6·6311464
31	117,205	9,213,768	6·9644374	45	64,931	4,211,421	6·6244286
31¼	116,020	9,096,563	6·9588772	45¼	64,218	4,146,490	6·6176807
31½	114,846	8,980,543	6·9533025	45½	63,512	4,082,272	6·6109017
31¾	113,682	8,865,697	6·9477130	45¾	62,813	4,018,760	6·6040921
32	112,529	8,752,015	6·9421083	46	62,120	3,955,947	6·5972508
32¼	111,386	8,639,486	6·9364881	46¼	61,433	3,893,827	6·5903770
32½	110,253	8,528,100	6·9308523	46½	60,752	3,832,394	6·5834697
32¾	109,131	8,417,847	6·9252012	46¾	60,078	3,771,642	6·5765302
33	108,018	8,308,716	6·9195341	47	59,409	3,711,564	6·5695565
33¼	106,916	8,200,698	6·9138509	47¼	58,747	3,652,155	6·5625498
33½	105,823	8,093,782	6·9081514	47½	58,091	3,593,408	6·5555068
33¾	104,741	7,987,959	6·9024359	47¾	57,440	3,535,317	6·5484288
34	103,668	7,883,218	6·8967036	48	56,796	3,477,877	6·5413146
34¼	102,604	7,779,550	6·8909545	48¼	56,157	3,421,081	6·5341633
34½	101,550	7,676,946	6·8851887	48½	55,525	3,364,924	6·5269748
34¾	100,506	7,575,396	6·8794056	48¾	54,898	3,309,399	6·5197493
35	99,471	7,474,890	6·8736048	49	54,276	3,254,501	6·5124843
35¼	98,446	7,375,419	6·8677868	49¼	53,661	3,200,225	6·5051812
35½	97,429	7,276,973	6·8619506	49½	53,050	3,146,564	6·4978360
35¾	96,422	7,179,544	6·8560966	49¾	52,446	3,093,514	6·4904515
36	95,424	7,083,122	6·8502246	50	51,847	3,041,068	6·4830264
36¼	94,435	6,987,698	6·8443343	50¼	51,253	2,989,221	6·4755579
36½	93,455	6,893,263	6·8384247	50½	50,665	2,937,968	6·4680474
36¾	92,484	6,799,808	6·8324967	50¾	50,082	2,887,303	6·4604919
37	91,522	6,707,324	6·8265490	51	49,504	2,837,221	6·4528931
37¼	90,568	6,615,802	6·8205824	51¼	48,932	2,787,717	6·4452491
37½	89,623	6,525,234	6·8145958	51½	48,365	2,738,785	6·4375587
37¾	88,687	6,435,611	6·8085897	51¾	47,803	2,690,420	6·4298201
38	87,759	6,346,924	6·8025631	52	47,246	2,642,617	6·4220347
38¼	86,839	6,259,165	6·7965167	52¼	46,694	2,595,371	6·4141993
38½	85,928	6,172,326	6·7904491	52½	46,147	2,548,677	6·4063153
38¾	85,025	6,086,398	6·7843605	52¾	45,606	2,502,530	6·3983793
39	84,130	6,001,373	6·7782504	53	45,069	2,456,924	6·3903910
39¼	83,244	5,917,243	6·7721192	53¼	44,537	2,411,855	6·3823521
39½	82,365	5,833,999	6·7659664	53½	44,010	2,367,318	6·3742570
39¾	81,495	5,751,634	6·7597910	53¾	43,487	2,323,308	6·3661072
40	80,632	5,670,139	6·7535938	54	42,970	2,279,821	6·3579005
40¼	79,777	5,589,507	6·7473738	54¼	42,444	2,236,851	6·3496369
40½	78,930	5,509,730	6·7411303	54½	41,921	2,194,407	6·3413178
40¾	78,090	5,430,800	6·7348638	54¾	41,401	2,152,486	6·3329412
41	77,258	5,352,710	6·7285737	55	40,884	2,111,085	6·3245067
41¼	76,434	5,275,452	6·7222595	55¼	40,370	2,070,201	6·3160123
41½	75,617	5,199,018	6·7159215	55½	39,860	2,029,831	6·3074596
41¾	74,808	5,123,401	6·7095583	55¾	39,352	1,989,971	6·2988466

QUARTERLY TABLE:—FEMALES. Interest 3 per Cent.

Age (x)	D_x	N_x	λN_x	**Age** (x)	D_x	N_x	λN_x
56	38,848	1,950,619	6·2901727	70	15,256	464,976	5·6674305
56¼	38,346	1,911,771	6·2814357	70¼	14,914	449,720	5·6529422
56½	37,848	1,873,425	6·2726375	70½	14,576	434,806	5·6382955
56¾	37,353	1,835,577	6·2637733	70¾	14,241	420,230	5·6234871
57	36,861	1,798,224	6·2548428	71	13,909	405,989	5·6085142
57¼	36,373	1,761,363	6·2458481	71¼	13,581	392,080	5·5933747
57½	35,887	1,724,990	6·2367866	71½	13,255	378,499	5·5780648
57¾	35,404	1,689,103	6·2276554	71¾	12,933	365,244	5·5625831
58	34,925	1,653,699	6·2184567	72	12,615	352,311	5·5469262
58¼	34,449	1,618,774	6·2091852	72¼	12,299	339,696	5·5310904
58½	33,975	1,584,325	6·1998456	72½	11,988	327,397	5·5150747
58¾	33,505	1,550,350	6·1904298	72¾	11,679	315,409	5·4988741
59	33,038	1,516,845	6·1809427	73	11,375	303,730	5·4824877
59¼	32,573	1,483,807	6·1713783	73¼	11,073	292,355	5·4659106
59½	32,112	1,451,234	6·1617363	73½	10,776	281,282	5·4491420
59¾	31,654	1,419,122	6·1520191	73¾	10,482	270,506	5·4321769
60	31,199	1,387,468	6·1422236	74	10,192	260,024	5·4150135
60¼	30,746	1,356,269	6·1323462	74¼	9,906·3	249,831·8	5·3976481
60½	30,297	1,325,523	6·1223863	74½	9,624·0	239,925·5	5·3800774
60¾	29,850	1,295,226	6·1123469	74¾	9,345·7	230,301·5	5·3622977
61	29,406	1,265,376	6·1022209	75	9,071·4	220,955·8	5·3443058
61¼	28,965	1,235,970	6·0920080	75¼	8,801·1	211,884·4	5·3260982
61½	28,527	1,207,005	6·0817109	75½	8,534·8	203,083·3	5·3076736
61¾	28,092	1,178,478	6·0713222	75¾	8,272·7	194,548·5	5·2890290
62	27,660	1,150,386	6·0608452	76	8,014·8	186,275·8	5·2701569
62¼	27,230	1,122,726	6·0502753	76¼	7,761·1	178,261·0	5·2510563
62½	26,803	1,095,496	6·0396124	76½	7,511·6	170,499·9	5·2317244
62¾	26,379	1,068,693	6·0288518	76¾	7,266·5	162,988·3	5·2121557
63	25,957	1,042,314	6·0179969	77	7,025·7	155,721·8	5·1923500
63¼	25,539	1,016,357	6·0070476	77¼	6,789·3	148,696·1	5·1722993
63½	25,123	990,818	5·9959939	77½	6,557·3	141,906·8	5·1520038
63¾	24,709	965,695	5·9848400	77¾	6,329·8	135,349·5	5·1314583
64	24,299	940,986	5·9735832	78	6,106·7	129,019·7	5·1106570
64¼	23,891	916,687	5·9622211	78¼	5,888·2	122,913·0	5·0895979
64½	23,485	892,796	5·9507522	78½	5,674·2	117,024·8	5·0682787
64¾	23,083	869,311	5·9391752	78¾	5,464·8	111,350·6	5·0466941
65	22,683	846,228	5·9274874	79	5,260·0	105,885·8	5·0248386
65¼	22,286	823,545	5·9156874	79¼	5,059·8	100,625·8	5·0027103
65½	21,891	801,259	5·9037730	79½	4,864·2	95,566·0	4·9803034
65¾	21,499	779,368	5·8917426	79¾	4,673·2	90,701·8	4·9576159
66	21,110	757,869	5·8795941	80	4,486·8	86,028·6	4·9346429
66¼	20,723	736,759	5·8673254	80¼	4,305·1	81,541·8	4·9113803
66½	20,339	716,036	5·8549349	80½	4,128·0	77,236·7	4·8878237
66¾	19,958	695,697	5·8424201	80¾	3,955·6	73,108·7	4·8639690
67	19,579	675,739	5·8297790	81	3,787·8	69,153·1	4·8398116
67¼	19,204	656,160	5·8170098	81¼	3,624·5	65,365·3	4·8153473
67½	18,830	636,956	5·8041094	81½	3,465·9	61,740·8	4·7905723
67¾	18,460	618,126	5·7910770	81¾	3,311·9	58,274·9	4·7654816
68	18,093	599,666	5·7779094	82	3,162·4	54,963·0	4·7400704
68¼	17,728	581,573	5·7646043	82¼	3,017·4	51,800·6	4·7143348
68½	17,366	563,845	5·7511598	82½	2,876·9	48,783·2	4·6882703
68¾	17,007	546,479	5·7375735	82¾	2,740·9	45,906·3	4·6618723
69	16,651	529,472	5·7238430	83	2,609·3	43,165·4	4·6351357
69¼	16,298	512,821	5·7099658	83¼	2,482·1	40,556·1	4·6080562
69½	15,947	496,523	5·6959393	83½	2,359·2	38,074·0	4·5806285
69¾	15,600	480,576	5·6817621	83¾	2,240·6	35,714·8	4·5528483

QUARTERLY TABLE:—FEMALES. Interest 3 per Cent.

Age (x)	D_x	N_x	λN_x	Age (x)	D_x	N_x	λN_x
84	2,126·2	33,474·2	4·5247102	97	32·376	271·074	2·4330879
84¼	2,015·9	31,348·0	4·4962098	97¼	28·843	238·698	2·3778488
84½	1,909·8	29,332·1	4·4673432	97½	25·654	209·855	2·3219194
84¾	1,807·7	27,422·3	4·4381039	97¾	22·780	184·201	2·2652920
85	1,709·6	25,614·6	4·4084876	98	20·195	161·421	2·2079600
85¼	1,615·4	23,905·0	4·3784887	98¼	17·874	141·226	2·1499147
85½	1,525·0	22,289·6	4·3481023	98½	15·793	123·352	2·0911463
85¾	1,438·4	20,764·6	4·3173235	98¾	13·930	107·559	2·0316469
86	1,355·4	19,326·2	4·2861465	99	12·266	93·629	1 9714104
86¼	1,276·1	17,970·8	4·2545674	99¼	10·782	81·363	1·9104270
86½	1,200·2	16,694·7	4·2225786	99½	9·4608	70·5809	1·8486872
86¾	1,127·8	15,494·5	4·1901776	99¾	8·2869	61·1201	1·7861840
87	1,058·7	14,366·7	4·1573570	100	7·2456	52·8332	1·7229069
87¼	992·91	13,308·02	4·1241128	100¼	6·3238	45·5876	1·6588467
87½	930·25	12,315·11	4·0904379	100½	5·5091	39·2638	1·5939923
87¾	870·67	11,384·86	4·0563292	100¾	4·7905	33·7547	1·5283342
88	814·07	10,514·19	4·0217763	101	4·1579	28·9642	1·4618615
88¼	760·36	9,700·12	3·9867771	101¼	3·6021	24·8063	1·3945620
88½	709·44	8,939·76	3·9513258	101½	3·1146	21·2042	1·3264219
88¾	661·23	8,230·32	3·9154167	101¾	2·6879	18·0896	1·2574290
89	615·63	7,569·09	3·8790436	102	2·3152	15·4017	1·1875686
89¼	572·55	6,953·46	3·8422010	102¼	1·9902	13·0865	1·1168235
89½	531·90	6,380·91	3·8048826	102½	1·7075	11·0963	1·0451782
89¾	493·57	5,849·01	3·7670823	102¾	1·4620	9·3888	0·9726101
90	457·49	5,355·44	3·7287951	103	1·2493	7·9268	0·8990979
90¼	423·56	4,897·95	3·6900144	103¼	1·0653	6·6775	0·8246139
90½	391·69	4,474·39	3·6507338	103½	·9066	5·6122	0·7491331
90¾	361·79	4,082·70	3·6109475	103¾	·7699	4·7056	0·6726150
91	333·77	3,720·91	3·5706492	104	·6525	3·9357	0·5950220
91¼	307·55	3,387·14	3·5298331	104¼	·5518	3·2832	0·5162973
91½	283·04	3,079·59	3·4884929	104½	·4656	2·7314	0·4363853
91¾	260·17	2,796·55	3·4466226	104¾	·3921	2·2658	0·3552216
92	238·84	2,536·38	3·4042143	105	·3294	1·8737	0·2727001
92¼	218·98	2,297·54	3·3612631	105¼	·2762	1·5443	0·1887317
92½	200·52	2,078·56	3·3177625	105½	·2310	1·2681	0·1031535
92¾	183·37	1,878·04	3·2737048	105¾	·1928	1·0371	0·0158206
93	167·47	1,694·67	3·2290851	106	·1606	·8443	$\bar{1}$·9264968
93¼	152·74	1,527·20	3·1838959	106¼	·1334	·6837	$\bar{1}$·8348656
93½	139·13	1,374·46	3·1381321	106½	·1106	·5503	$\bar{1}$·7405995
93¾	126·55	1,235·33	3·0917830	106¾	·0915	·4397	$\bar{1}$·6431565
94	114·95	1,108·78	3·0448454	107	·0755	·3482	$\bar{1}$·5418288
94¼	104·27	993·83	2·9973121	107¼	·0621	·2727	$\bar{1}$·4356851
94½	94·448	889·559	2·9491747	107½	·0510	·2106	$\bar{1}$·3234584
94¾	85·429	795·111	2·9004278	107¾	·0418	·1596	$\bar{1}$·2030329
95	77·160	709·682	2·8510638	108	·0341	·1178	$\bar{1}$·0711453
95¼	69·589	632·522	2·8010757	108¼	·0278	·0837	$\bar{2}$·9227255
95½	62·669	562·933	2·7504567	108½	·0226	·0559	$\bar{2}$·7474118
95¾	56·352	500·264	2·6991993	108¾	·0184	·0333	$\bar{2}$·5224442
96	50·596	443·912	2·6472969	109	·0149	·0149	$\bar{2}$·1731863
96¼	45·358	393·316	2·5947416				
96½	40·600	347·958	2·5415268				
96¾	36·284	307·358	2·4876445				

QUARTERLY TABLE :—MALES. Interest 3 per Cent.

VALUES OF ANNUITIES.* SINGLE and QUARTERLY PREMIUMS which insure £1 on the LIFE of a MALE.

Age	**Present Value** of an **Annuity** of £1 payable every **Quarter** of a Year.	**Annuity** payable every **Quarter** of a Year which £1 will purchase.	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Quarterly Premium** which will insure £1 over the **Whole Term of Life.**	$\lambda\left(\frac{N_x}{D_x}\right)$ $=\lambda A_x$	$\lambda\,\Pi_x$	$\lambda\,\pi_x$	**Age**
x	$\frac{N_x}{D_x}=A_x$	$\frac{D_x}{N_x}=a_x$	$1-d\,A_x=\Pi_x$	$a_x-d\ =\pi_x$				x
	£	£	£	£				
0	74·4718	·013428	·44562	·005984	1·8719919	$\bar{1}$·6489647	$\bar{3}$·7769916	0
0¼	80·8454	·012369	·39817	·004925	1·9076554	$\bar{1}$·6000685	$\bar{3}$·6924062	0¼
0½	83·2812	·012008	·38004	·004564	1·9205470	$\bar{1}$·5798293	$\bar{3}$·6593456	0½
0¾	85·4465	·011703	·36392	·004259	1·9316945	$\bar{1}$·5610059	$\bar{3}$·6293076	0¾
1	87·2810	·011457	·35027	·004013	1·9409198	$\bar{1}$·5444029	$\bar{3}$·6034692	1
1¼	88·7250	·011271	·33952	·003827	1·9480458	$\bar{1}$·5308654	$\bar{3}$·5828585	1¼
1½	89·9616	·011116	·33031	·003672	1·9540572	$\bar{1}$·5189217	$\bar{3}$·5649027	1½
1¾	91·0051	·010988	·32254	·003544	1·9590658	$\bar{1}$·5085836	$\bar{3}$·5494937	1¾
2	91·8718	·010885	·31609	·003441	1·9631824	$\bar{1}$·4998108	$\bar{3}$·5366847	2
2¼	92·5808	·010801	·31081	·003357	1·9665212	$\bar{1}$·4924950	$\bar{3}$·5259513	2¼
2½	93·1534	·010735	·30655	·003291	1·9691985	$\bar{1}$·4865013	$\bar{3}$·5173279	2½
2¾	93·6119	·010682	·30314	·003238	1·9713312	$\bar{1}$·4816432	$\bar{3}$·5102768	2¾
3	93·9801	·010641	·30040	·003197	1·9730361	$\bar{1}$·4776999	$\bar{3}$·5047426	3
3¼	94·3100	·010603	·29794	·003159	1·9745577	$\bar{1}$·4741288	$\bar{3}$·4995496	3¼
3½	94·5984	·010571	·29579	·003127	1·9758838	$\bar{1}$·4709835	$\bar{3}$·4951279	3½
3¾	94·8480	·010543	·29394	·003099	1·9770283	$\bar{1}$·4682587	$\bar{3}$·4912216	3¾
4	95·0616	·010519	·29234	·003075	1·9780053	$\bar{1}$·4658882	$\bar{3}$·4878451	4
4¼	95·2414	·010500	·29101	·003056	1·9788259	$\bar{1}$·4639079	$\bar{3}$·4851533	4¼
4½	95·3901	·010483	·28990	·003039	1·9795035	$\bar{1}$·4622482	$\bar{3}$·4827307	4½
4¾	95·5096	·010470	·28901	·003026	1·9800471	$\bar{1}$·4609129	$\bar{3}$·4808689	4¾
5	95·6026	·010460	·28832	·003016	1·9804699	$\bar{1}$·4598748	$\bar{3}$·4794313	5
5¼	95·6709	·010452	·28781	·003008	1·9807801	$\bar{1}$·4591059	$\bar{3}$·4782778	5¼
5½	95·7174	·010447	·28746	·003003	1·9809908	$\bar{1}$·4585774	$\bar{3}$·4775553	5½
5¾	95·7431	·010445	·28727	·003001	1·9811073	$\bar{1}$·4582903	$\bar{3}$·4772660	5¾
6	95·7505	·010444	·28722	·003000	1·9811413	$\bar{1}$·4582147	$\bar{3}$·4771213	6
6¼	95·7417	·010445	·28728	·003001	1·9811012	$\bar{1}$·4583054	$\bar{3}$·4772660	6¼
6½	95·7178	·010447	·28746	·003003	1·9809929	$\bar{1}$·4585774	$\bar{3}$·4775553	6½
6¾	95·6808	·010451	·28774	·003007	1·9808249	$\bar{1}$·4590002	$\bar{3}$·4781334	6¾
7	95·6321	·010457	·28810	·003013	1·9806037	$\bar{1}$·4595433	$\bar{3}$·4789991	7
7¼	95·5769	·010463	·28851	·003019	1·9803531	$\bar{1}$·4601609	$\bar{3}$·4798631	7¼
7½	95·5107	·010470	·28900	·003026	1·9800520	$\bar{1}$·4608978	$\bar{3}$·4808689	7½
7¾	95·4334	·010479	·28958	·003035	1·9797005	$\bar{1}$·4617686	$\bar{3}$·4821587	7¾
8	95·3454	·010488	·29023	·003044	1·9792998	$\bar{1}$·4627423	$\bar{3}$·4834446	8
8¼	95·2477	·010499	·29096	·003055	1·9788546	$\bar{1}$·4638333	$\bar{3}$·4850112	8¼
8½	95·1406	·010511	·29176	·003067	1·9783660	$\bar{1}$·4650258	$\bar{3}$·4867138	8½
8¾	95·0240	·010524	·29262	·003080	1·9778334	$\bar{1}$·4663040	$\bar{3}$·4885507	8¾
9	94·8993	·010537	·29355	·003093	1·9772631	$\bar{1}$·4676821	$\bar{3}$·4903799	9
9¼	94·7664	·010552	·29454	·003108	1·9766544	$\bar{1}$·4691443	$\bar{3}$·4924810	9¼
9½	94·6255	·010568	·29559	·003124	1·9760080	$\bar{1}$·4706897	$\bar{3}$·4947110	9½
9¾	94·4775	·010585	·29669	·003141	1·9753283	$\bar{1}$·4723029	$\bar{3}$·4970679	9¾
10	94·3226	·010602	·29785	·003158	1·9746159	$\bar{1}$·4739976	$\bar{3}$·4994121	10
10¼	94·1615	·010620	·29905	·003176	1·9738735	$\bar{1}$·4757438	$\bar{3}$·5018805	10¼
10½	93·9943	·010639	·30029	·003195	1·9731015	$\bar{1}$·4775409	$\bar{3}$·5044709	10½
10¾	93·8215	·010659	·30158	·003215	1·9723022	$\bar{1}$·4794025	$\bar{3}$·5071810	10¾
11	93·6435	·010679	30290	·003235	1·9714779	$\bar{1}$·4812993	$\bar{3}$·5098743	11
11¼	93·4607	·010700	·30426	·003256	1·9706289	$\bar{1}$·4832449	$\bar{3}$·5126844	11¼
11½	93·2733	·010721	·30566	·003277	1·9697573	$\bar{1}$·4852386	$\bar{3}$·5154764	11½
11¾	93·0819	·010743	·30708	·003299	1·9688652	$\bar{1}$·4872515	$\bar{3}$·5183823	11¾
12	92·8869	·010766	·30853	·003322	1·9679547	$\bar{1}$·4892974	$\bar{3}$·5213996	12
12¼	92·6885	·010789	·31001	·003345	1·9670258	$\bar{1}$·4913757	$\bar{3}$·5243961	12¼
12½	92·4869	·010812	·31151	·003368	1·9660803	$\bar{1}$·4934720	$\bar{3}$·5273721	12½
12¾	92·2826	·010836	·31303	·003392	1·9651199	$\bar{1}$·4955860	$\bar{3}$·5304558	12¾
13	92·0761	·010861	·31457	·003417	1·9641469	$\bar{1}$·4977173	$\bar{3}$·5336450	13
13¼	91·8672	·010885	·31612	·003441	1·9631605	$\bar{1}$·4998520	$\bar{3}$·5366847	13¼
13½	91·6564	·010910	·31769	·003466	1·9621627	$\bar{1}$·5020035	$\bar{3}$·5398286	13½
13¾	91·4440	·010936	·31928	·003492	1·9611550	$\bar{1}$·5041717	$\bar{3}$·5430742	13¾

* **Note.**—The value of an Annuity of £·250 payable at the commencement of every **Quarter** of a Year that the Annuitant lives, making £1 a Year, is obtained by dividing the Number in Column 2. by *four.* The **Sum Insured** is payable at the end of the **Quarter** of a Year of Age in which death happens.

QUARTERLY TABLE:—MALES. Interest 3 per Cent.

VALUES OF ANNUITIES. SINGLE and QUARTERLY PREMIUMS which insure £1 on the LIFE of a MALE.

Age	**Present Value** of an **Annuity** of £1 payable every **Quarter** of a Year.	**Annuity** payable every **Quarter** of a Year which £1 will purchase.	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Quarterly Premium** which will insure £1 over the **Whole Term of Life.**	$\lambda\left(\frac{N_x}{D_x}\right) = \lambda A_x$	$\lambda\,\Pi_x$	$\lambda\,\pi_x$	**Age**
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$1 - d\,A_x = \Pi_x$	$a_x - d = \pi_x$				x
	£	£	£	£				
14	91·2307	·010961	·32086	·003517	1·9601409	$\bar{1}$·5063156	$\bar{3}$·5461724	14
14¼	91·0161	·010987	·32246	·003543	1·9591180	$\bar{1}$·5084758	$\bar{3}$·5493712	14¼
14½	90·8008	·011013	·32406	·003569	1·9580897	$\bar{1}$·5106254	$\bar{3}$·5525465	14½
14¾	90·5848	·011039	·32567	·003595	1·9570553	$\bar{1}$·5127778	$\bar{3}$·5556989	14¾
15	90·3688	·011066	·32728	·003622	1·9560184	$\bar{1}$·5149195	$\bar{3}$·5589484	15
15¼	90·1526	·011092	·32889	·003648	1·9549782	$\bar{1}$·5170507	$\bar{3}$·5620548	15¼
15½	89·9364	·011119	·33050	·003675	1·9539357	$\bar{1}$·5191715	$\bar{3}$·5652573	15½
15¾	89·7211	·011146	·33210	·003702	1·9528945	$\bar{1}$·5212689	$\bar{3}$·5684364	15¾
16	89·5058	·011172	·33370	·003728	1·9518513	$\bar{1}$·5233562	$\bar{3}$·5714759	16
16¼	89·2909	·011199	·33530	·003755	1·9508072	$\bar{1}$·5254336	$\bar{3}$·5746099	16¼
16½	89·0774	·011226	·33689	·003782	1·9497678	$\bar{1}$·5274881	$\bar{3}$·5777215	16½
16¾	88·8647	·011253	·33848	·003809	1·9487294	$\bar{1}$·5295330	$\bar{3}$·5808110	16¾
17	88·6529	·011280	·34005	·003836	1·9476930	$\bar{1}$·5315428	$\bar{3}$·5838786	17
17¼	88·4427	·011307	·34162	·003863	1·9466620	$\bar{1}$·5335433	$\bar{3}$·5869247	17¼
17½	88·2343	·011333	·34317	·003889	1·9456374	$\bar{1}$·5355093	$\bar{3}$·5898379	17½
17¾	88·0268	·011360	·34471	·003916	1·9446148	$\bar{1}$·5374539	$\bar{3}$·5928427	17¾
18	87·8213	·011387	·34624	·003943	1·9436001	$\bar{1}$·5393772	$\bar{3}$·5958268	18
18¼	87·6171	·011413	·34776	·003969	1·9425890	$\bar{1}$·5412796	$\bar{3}$·5986811	18¼
18½	87·4152	·011440	·34927	·003996	1·9415872	$\bar{1}$·5431613	$\bar{3}$·6016255	18½
18¾	87·2148	·011466	·35076	·004022	1·9405904	$\bar{1}$·5450101	$\bar{3}$·6044421	18¾
19	87·0164	·011492	·35223	·004048	1·9396013	$\bar{1}$·5468263	$\bar{3}$·6072405	19
19¼	86·8203	·011518	·35370	·004074	1·9386211	$\bar{1}$·5486351	$\bar{3}$·6100210	19¼
19½	86·6265	·011544	·35514	·004100	1·9376507	$\bar{1}$·5503996	$\bar{3}$·6127839	19½
19¾	86·4342	·011569	·35657	·004125	1·9366856	$\bar{1}$·5521448	$\bar{3}$·6154240	19¾
20	86·2445	·011595	·35798	·004151	1·9357313	$\bar{1}$·5538588	$\bar{3}$·6181527	20
20¼	86·0610	·011620	·35935	·004176	1·9348066	$\bar{1}$·5555176	$\bar{3}$·6207605	20¼
20½	85·8766	·011645	·36072	·004201	1·9338751	$\bar{1}$·5571702	$\bar{3}$·6233527	20½
20¾	85·6919	·011670	·36209	·004226	1·9329400	$\bar{1}$·5588165	$\bar{3}$·6259295	20¾
21	85·5064	·011695	·36348	·004251	1·9319985	$\bar{1}$·5604805	$\bar{3}$·6284911	21
21¼	85·3200	·011721	·36486	·004277	1·9310509	$\bar{1}$·5621263	$\bar{3}$·6311393	21¼
21½	85·1324	·011746	·36626	·004302	1·9300946	$\bar{1}$·5637895	$\bar{3}$·6336704	21½
21¾	84·9446	·011772	·36766	·004328	1·9291357	$\bar{1}$·5654464	$\bar{3}$·6362873	21¾
22	84·7551	·011799	·36907	·004355	1·9281657	$\bar{1}$·5671087	$\bar{3}$·6389882	22
22¼	84·5656	·011825	·37048	·004381	1·9271937	$\bar{1}$·5687648	$\bar{3}$·6415733	22¼
22½	84·3745	·011852	·37190	·004408	1·9262109	$\bar{1}$·5704262	$\bar{3}$·6442416	22½
22¾	84·1829	·011879	·37333	·004435	1·9252238	$\bar{1}$·5720929	$\bar{3}$·6468936	22¾
23	83·9904	·011906	·37476	·004462	1·9242297	$\bar{1}$·5737532	$\bar{3}$·6495296	23
23¼	83·7964	·011934	·37621	·004490	1·9232255	$\bar{1}$·5754303	$\bar{3}$·6522463	23¼
23½	83·6023	·011961	·37765	·004517	1·9222180	$\bar{1}$·5770895	$\bar{3}$·6548501	23½
23¾	83·4067	·011989	·37911	·004545	1·9212010	$\bar{1}$·5787652	$\bar{3}$·6575339	23¾
24	83·2099	·012018	·38057	·004574	1·9201748	$\bar{1}$·5804346	$\bar{3}$·6602962	24
24¼	83·0124	·012046	·38204	·004602	1·9191431	$\bar{1}$·5821088	$\bar{3}$·6629466	24¼
24½	82·8138	·012075	·38352	·004631	1·9181028	$\bar{1}$·5837880	$\bar{3}$·6656748	24½
24¾	82·6141	·012104	·38501	·004660	1·9170542	$\bar{1}$·5854720	$\bar{3}$·6683859	24¾
25	82·4134	·012134	·38650	·004690	1·9159977	$\bar{1}$·5871495	$\bar{3}$·6711728	25
25¼	82·2117	·012164	·38800	·004720	1·9149334	$\bar{1}$·5888317	$\bar{3}$·6739420	25¼
25½	82·0091	·012194	·38951	·004750	1·9138618	$\bar{1}$·5905186	$\bar{3}$·6766936	25½
25¾	81·8050	·012224	·39103	·004780	1·9127797	$\bar{1}$·5922101	$\bar{3}$·6794279	25¾
26	81·5995	·012255	·39256	·004811	1·9116872	$\bar{1}$·5939060	$\bar{3}$·6822354	26
26¼	81·3933	·012286	·39409	·004842	1·9105887	$\bar{1}$·5955954	$\bar{3}$·6850248	26¼
26½	81·1858	·012317	·39564	·004873	1·9094802	$\bar{1}$·5973002	$\bar{3}$·6877964	26½
26¾	80·9772	·012349	·39719	·004905	1·9083626	$\bar{1}$·5989983	$\bar{3}$·6906390	26¾
27	80·7674	·012381	·39875	·004937	1·9072360	$\bar{1}$·6007007	$\bar{3}$·6934631	27
27¼	80·5566	·012414	·40032	·004970	1·9061009	$\bar{1}$·6024073	$\bar{3}$·6963564	27¼
27½	80·3447	·012446	·40190	·005002	1·9049574	$\bar{1}$·6041180	$\bar{3}$·6991437	27½
27¾	80·1313	·012480	·40349	·005036	1·9038021	$\bar{1}$·6058328	$\bar{3}$·7020857	27¾

QUARTERLY TABLE :—MALES. Interest 3 per Cent.

VALUES OF ANNUITIES. SINGLE and QUARTERLY PREMIUMS which insure £1 on the LIFE of a MALE.

Age x	Present Value of an **Annuity** of £1 payable every **Quarter** of a Year $\frac{N_x}{D_x} = A_x$	**Annuity** payable every **Quarter** of a Year which £1 will purchase. $\frac{D_x}{N_x} = a_x$	**Single Premium** which will insure £1 over the **Whole Term of Life.** $1 - d A_x = \Pi_x$	**Quarterly Premium** which will insure £1 over the **Whole Term of Life.** $a_x - d = \pi_x$	$\lambda \left(\frac{N_x}{D_x}\right) = \lambda A_x$	$\lambda \Pi_x$	$\lambda \pi_x$	Age x
	£	£	£	£				
28	79·9163	·012513	·40509	·005069	1·9026355	$\bar{1}$·6075515	$\bar{3}$·7049223	28
28¼	79·7005	·012547	·40670	·005103	1·9014613	$\bar{1}$·6092742	$\bar{3}$·7078256	28¼
28½	79·4842	·012581	·40831	·005137	1·9002806	$\bar{1}$·6109900	$\bar{3}$·7107096	28½
28¾	79·2657	·012616	·40993	·005172	1·8990852	$\bar{1}$·6127097	$\bar{3}$·7136585	28¾
29	79·0459	·012651	·41157	·005207	1·8978796	$\bar{1}$·6144437	$\bar{3}$·7165876	29
29¼	78·8258	·012686	·41321	·005242	1·8966686	$\bar{1}$·6161708	$\bar{3}$·7194970	29¼
29½	78·6034	·012722	·41486	·005278	1·8954415	$\bar{1}$·6179016	$\bar{3}$·7224694	29½
29¾	78·3802	·012758	·41652	·005314	1·8942064	$\bar{1}$·6196359	$\bar{3}$·7254216	29¾
30	78·1556	·012795	·41820	·005351	1·8929604	$\bar{1}$·6213840	$\bar{3}$·7284350	30
30¼	77·9299	·012832	·41988	·005388	1·8917039	$\bar{1}$·6231252	$\bar{3}$·7314276	30¼
30½	77·7028	·012870	·42157	·005426	1·8904368	$\bar{1}$·6248697	$\bar{3}$·7344798	30½
30¾	77·4744	·012907	·42327	·005463	1·8891582	$\bar{1}$·6266175	$\bar{3}$·7374312	30¾
31	77·2447	·012946	·42498	·005502	1·8878689	$\bar{1}$·6283685	$\bar{3}$·7405206	31
31¼	77·0138	·012985	·42670	·005541	1·8865683	$\bar{1}$·6301226	$\bar{3}$·7435882	31¼
31½	76·7815	·013024	·42843	·005580	1·8852567	$\bar{1}$·6318799	$\bar{3}$·7466342	31½
31¾	76·5479	·013064	·43016	·005620	1·8839332	$\bar{1}$·6336300	$\bar{3}$·7497363	31¾
32	76·3130	·013104	·43191	·005660	1·8825986	$\bar{1}$·6353933	$\bar{3}$·7528164	32
32¼	76·0768	·013145	·43367	·005701	1·8812524	$\bar{1}$·6371594	$\bar{3}$·7559510	32¼
32½	75·8393	·013186	·43544	·005742	1·8798944	$\bar{1}$·6389283	$\bar{3}$·7590632	32½
32¾	75·6005	·013227	·43722	·005783	1·8785245	$\bar{1}$·6407000	$\bar{3}$·7621532	32¾
33	75·3603	·013270	·43901	·005826	1·8771425	$\bar{1}$·6424744	$\bar{3}$·7653705	33
33¼	75·1187	·013312	·44080	·005868	1·8757483	$\bar{1}$·6442416	$\bar{3}$·7684901	33¼
33½	74·8760	·013355	·44261	·005911	1·8743425	$\bar{1}$·6460212	$\bar{3}$·7716610	33½
33¾	74·6318	·013399	·44443	·005955	1·8729237	$\bar{1}$·6478034	$\bar{3}$·7748818	33¾
34	74·3863	·013443	·44626	·005999	1·8714928	$\bar{1}$·6495880	$\bar{3}$·7780789	34
34¼	74·1394	·013488	·44809	·006044	1·8700493	$\bar{1}$·6513653	$\bar{3}$·7813245	34¼
34½	73·8913	·013533	·44994	·006089	1·8685934	$\bar{1}$·6531546	$\bar{3}$·7845460	34½
34¾	73·6418	·013579	·45180	·006135	1·8671245	$\bar{1}$·6549462	$\bar{3}$·7878146	34¾
35	73·3911	·013626	·45366	·006182	1·8656431	$\bar{1}$·6567305	$\bar{3}$·7911290	35
35¼	73·1389	·013673	·45554	·006229	1·8641482	$\bar{1}$·6585265	$\bar{3}$·7944183	35¼
35½	72·8854	·013720	·45743	·006276	1·8626404	$\bar{1}$·6603246	$\bar{3}$·7976829	35½
35¾	72·6306	·013768	·45933	·006324	1·8611194	$\bar{1}$·6621248	$\bar{3}$·8009919	35¾
36	72·3744	·013817	·46123	·006373	1·8595852	$\bar{1}$·6639175	$\bar{3}$·8043439	36
36¼	72·1171	·013866	·46315	·006422	1·8580380	$\bar{1}$·6657217	$\bar{3}$·8076703	36¼
36½	71·8582	·013916	·46507	·006472	1·8564766	$\bar{1}$·6675183	$\bar{3}$·8110385	36½
36¾	71·5981	·013967	·46701	·006523	1·8549017	$\bar{1}$·6693262	$\bar{3}$·8144474	36¾
37	71·3367	·014018	·46896	·006574	1·8533128	$\bar{1}$·6711358	$\bar{3}$·8178297	37
37¼	71·0739	·014070	·47091	·006626	1·8517100	$\bar{1}$·6729379	$\bar{3}$·8212514	37¼
37½	70·8098	·014122	·47288	·006678	1·8500935	$\bar{1}$·6747509	$\bar{3}$·8246464	37½
37¾	70·5444	·014175	·47486	·006731	1·8484625	$\bar{1}$·6765656	$\bar{3}$·8280796	37¾
38	70·2778	·014229	·47684	·006785	1·8468179	$\bar{1}$·6783727	$\bar{3}$·8315499	38
38¼	70·0096	·014284	·47884	·006840	1·8451579	$\bar{1}$·6801904	$\bar{3}$·8350561	38¼
38½	69·7404	·014339	·48084	·006895	1·8434843	$\bar{1}$·6820006	$\bar{3}$·8385343	38½
38¾	69·4697	·014395	·48286	·006951	1·8417953	$\bar{1}$·6838212	$\bar{3}$·8420473	38¾
39	69·1978	·014451	·48488	·007007	1·8400923	$\bar{1}$·6856343	$\bar{3}$·8455321	39
39¼	68·9246	·014509	·48691	·007065	1·8383741	$\bar{1}$·6874487	$\bar{3}$·8491122	39¼
39½	68·6500	·014567	·48896	·007123	1·8366405	$\bar{1}$·6892733	$\bar{3}$·8526629	39½
39¾	68·3741	·014625	·49101	·007181	1·8348918	$\bar{1}$·6910903	$\bar{3}$·8561849	39¾
40	68·0970	·014685	·49307	·007241	1·8331278	$\bar{1}$·6929086	$\bar{3}$·8597985	40
40¼	67·8186	·014745	·49515	·007301	1·8313489	$\bar{1}$·6947368	$\bar{3}$·8633823	40¼
40½	67·5389	·014806	·49723	·007362	1·8295540	$\bar{1}$·6965573	$\bar{3}$·8669958	40½
40¾	67·2579	·014868	·49932	·007424	1·8277435	$\bar{1}$·6983790	$\bar{3}$·8706380	40¾
41	66·9756	·014931	·50142	·007487	1·8259169	$\bar{1}$·7002017	$\bar{3}$·8743078	41
41¼	66·6922	·014994	·50353	·007550	1·8240750	$\bar{1}$·7020254	$\bar{3}$·8779470	41¼
41½	66·4073	·015059	·50565	·007615	1·8222162	$\bar{1}$·7038500	$\bar{3}$·8816699	41½
41¾	66·1213	·015124	·50778	·007680	1·8203412	$\bar{1}$·7056756	$\bar{3}$·8853612	41¾

QUARTERLY TABLE :—Males. Interest 3 per Cent.

Values of Annuities. Single and Quarterly Premiums which insure £1 on the Life of a Male.

Age	**Present Value** of an **Annuity** of £1 payable every **Quarter** of a Year.	**Annuity** payable every **Quarter** of a Year which £1 will purchase.	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Quarterly Premium** which will insure £1 over the **Whole Term of Life.**	$\lambda\left(\frac{N_x}{D_x}\right) = \lambda A_x$	$\lambda\,\Pi_x$	$\lambda\,\pi_x$	Age
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$1 - d\,A_x = \Pi_x$	$a_x - d = \pi_x$				x
	£	£	£	£				
42	65·8340	·015190	·50992	·007746	1·8184503	$\bar{1}$·7075020	$\bar{3}$·8890775	42
42¼	65·5454	·015257	·51207	·007813	1·8165422	$\bar{1}$·7093293	$\bar{3}$·8928178	42¼
42½	65·2555	·015324	·51423	·007880	1·8146174	$\bar{1}$·7111574	$\bar{3}$·8965262	42½
42¾	64·9645	·015393	·51639	·007949	1·8126764	$\bar{1}$·7129778	$\bar{3}$·9003125	42¾
43	64·6722	·015463	·51857	·008019	1·8107176	$\bar{1}$·7148074	$\bar{3}$·9041202	43
43¼	64·3786	·015533	·52075	·008089	1·8087418	$\bar{1}$·7166293	$\bar{3}$·9078948	43¼
43½	64·0838	·015605	·52295	·008161	1·8067480	$\bar{1}$·7184602	$\bar{3}$·9117434	43½
43¾	63·7877	·015677	·52515	·008233	1·8047371	$\bar{1}$·7202834	$\bar{3}$·9155581	43¾
44	63·4905	·015750	·52737	·008306	1·8027085	$\bar{1}$·7221154	$\bar{3}$·9193919	44
44¼	63·1920	·015825	·52959	·008381	1·8006624	$\bar{1}$·7239398	$\bar{3}$·9232958	44¼
44½	62·8923	·015900	·53182	·008456	1·7985975	$\bar{1}$·7257647	$\bar{3}$·9271650	44½
44¾	62·5913	·015977	·53406	·008533	1·7965139	$\bar{1}$·7275901	$\bar{3}$·9311017	44¾
45	62·2892	·016054	·53631	·008610	1·7944125	$\bar{1}$·7294159	$\bar{3}$·9350032	45
45¼	61·9857	·016133	·53857	·008689	1·7922912	$\bar{1}$·7312422	$\bar{3}$·9389698	45¼
45½	61·6811	·016212	·54084	·008768	1·7901518	$\bar{1}$·7330688	$\bar{3}$·9429005	45½
45¾	61·3753	·016293	·54311	·008849	1·7879935	$\bar{1}$·7348878	$\bar{3}$·9468942	45¾
46	61·0683	·016375	·54540	·008931	1·7858159	$\bar{1}$·7367151	$\bar{3}$·9509001	46
46¼	60·7600	·016458	·54769	·009014	1·7836179	$\bar{1}$·7385348	$\bar{3}$·9549176	46¼
46½	60·4505	·016542	·55000	·009098	1·7814002	$\bar{1}$·7403627	$\bar{3}$·9589459	46½
46¾	60·1398	·016628	·55231	·009184	1·7791619	$\bar{1}$·7421829	$\bar{3}$·9630319	46¾
47	59·8281	·016715	·55463	·009271	1·7769049	$\bar{1}$·7440034	$\bar{3}$·9671266	47
47¼	59·5149	·016803	·55696	·009359	1·7746258	$\bar{1}$·7458240	$\bar{3}$·9712294	47¼
47½	59·2006	·016892	·55930	·009448	1·7723262	$\bar{1}$·7476448	$\bar{3}$·9753399	47½
47¾	58·8851	·016982	·56165	·009538	1·7700055	$\bar{1}$·7494658	$\bar{3}$·9794573	47¾
48	58·5685	·017074	·56401	·009630	1·7676640	$\bar{1}$·7512868	$\bar{3}$·9836263	48
48¼	58·2505	·017167	·56637	·009723	1·7652993	$\bar{1}$·7531002	$\bar{3}$·9878003	48¼
48½	57·9314	·017262	·56875	·009818	1·7629137	$\bar{1}$·7549214	$\bar{3}$·9920230	48½
48¾	57·6111	·017358	·57113	·009914	1·7605058	$\bar{1}$·7567350	$\bar{3}$·9962489	48¾
49	57·2896	·017455	·57353	·010011	1·7580761	$\bar{1}$·7585561	$\bar{2}$·0004775	49
49¼	56·9669	·017554	·57593	·010110	1·7556225	$\bar{1}$·7603697	$\bar{2}$·0047512	49¼
49½	56·6429	·017654	·57834	·010210	1·7531451	$\bar{1}$·7621832	$\bar{2}$·0090257	49½
49¾	56·3177	·017756	·58076	·010312	1·7506446	$\bar{1}$·7639967	$\bar{2}$·0133429	49¾
50	55·9912	·017860	·58319	·010416	1·7481196	$\bar{1}$·7658101	$\bar{2}$·0177010	50
50¼	55·6635	·017965	·58563	·010521	1·7455707	$\bar{1}$·7676233	$\bar{2}$·0220570	50¼
50½	55·3346	·018072	·58808	·010628	1·7429967	$\bar{1}$·7694364	$\bar{2}$·0264515	50½
50¾	55·0045	·018180	·59054	·010736	1·7403979	$\bar{1}$·7712493	$\bar{2}$·0308425	50¾
51	54·6731	·018291	·59300	·010847	1·7377735	$\bar{1}$·7730547	$\bar{2}$·0353096	51
51¼	54·3473	·018400	·59543	·010956	1·7351783	$\bar{1}$·7748307	$\bar{2}$·0396520	51¼
51½	54·0210	·018511	·59786	·011067	1·7325625	$\bar{1}$·7765995	$\bar{2}$·0440299	51½
51¾	53·6938	·018624	·60029	·011180	1·7299242	$\bar{1}$·7783611	$\bar{2}$·0484418	51¾
52	53·3659	·018739	·60274	·011295	1·7272638	$\bar{1}$·7801300	$\bar{2}$·0528862	52
52¼	53·0371	·018855	·60518	·011411	1·7245798	$\bar{1}$·7818846	$\bar{2}$·0573237	52¼
52½	52·7077	·018973	·60763	·011529	1·7218741	$\bar{1}$·7836392	$\bar{2}$·0617916	52½
52¾	52·3771	·019092	·61009	·011648	1·7191417	$\bar{1}$·7853939	$\bar{2}$·0662514	52¾
53	52·0459	·019214	·61256	·011770	1·7163866	$\bar{1}$·7871486	$\bar{2}$·0707765	53
53¼	51·7139	·019337	·61503	·011893	1·7136072	$\bar{1}$·7888963	$\bar{2}$·0752914	53¼
53½	51·3807	·019463	·61751	·012019	1·7108002	$\bar{1}$·7906440	$\bar{2}$·0798683	53½
53¾	51·0470	·019590	·62000	·012146	1·7079699	$\bar{1}$·7923917	$\bar{2}$·0844333	53¾
54	50·7120	·019719	·62249	·012275	1·7051108	$\bar{1}$·7941324	$\bar{2}$·0890215	54
54¼	50·3762	·019851	·62499	·012407	1·7022254	$\bar{1}$·7958731	$\bar{2}$·0936668	54¼
54½	50·0396	·019984	·62750	·012540	1·6993142	$\bar{1}$·7976137	$\bar{2}$·0982975	54½
54¾	49·7022	·020120	·63001	·012676	1·6963756	$\bar{1}$·7993474	$\bar{2}$·1029822	54¾
55	49·3638	·020258	·63253	·012814	1·6934083	$\bar{1}$·8010811	$\bar{2}$·1076847	55
55¼	49·0244	·020398	·63505	·012954	1·6904127	$\bar{1}$·8028079	$\bar{2}$·1124039	55¼
55½	48·6841	·020541	·63759	·013097	1·6873873	$\bar{1}$·8045415	$\bar{2}$·1171718	55½
55¾	48·3432	·020685	·64013	·013241	1·6843350	$\bar{1}$·8062682	$\bar{2}$·1219208	55¾

QUARTERLY TABLE:—MALES. Interest 3 per Cent.

VALUES OF ANNUITIES. SINGLE and QUARTERLY PREMIUMS which insure £1 on the LIFE of a MALE.

Age	Present Value of an **Annuity** of £1 payable every **Quarter** of a Year.	**Annuity** payable every **Quarter** of a Year which £1 will purchase.	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Quarterly Premium** which will insure £1 over the **Whole Term of Life.**	$\lambda\left(\frac{N}{D_x}\right) = \lambda A_x$	$\lambda \Pi_x$	$\lambda \pi_x$	Age
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$1 - d A_x = \Pi_x$	$a_x - d = \pi_x$				x
	£	£	£	£				
56	48·0012	·020833	·64267	·013389	1·6812518	$\bar{1}$·8079880	$\bar{2}$·1267481	56
56¼	47·6586	·020983	·64522	·013539	1·6781409	$\bar{1}$·8097078	$\bar{2}$·1315866	56¼
56½	47·3149	·021135	·64778	·013691	1·6749982	1·8114275	$\bar{2}$·1364352	56½
56¾	46·9707	·021290	·65034	·013846	1·6718268	$\bar{1}$·8131405	$\bar{2}$·1413243	56¾
57	46·6257	·021447	·65291	·014003	1·6686251	$\bar{1}$·8148533	$\bar{2}$·1462211	57
57¼	46·2801	·021608	·65548	·014164	1·6653941	$\bar{1}$·8165594	$\bar{2}$·1511859	57¼
57½	45·9337	·021770	·65806	·014326	1·6621318	$\bar{1}$·8182655	$\bar{2}$·1561249	57½
57¾	45·5868	·021936	·66064	·014492	1·6588393	$\bar{1}$·8199649	$\bar{2}$·1611283	57¾
58	45·2392	·022105	·66323	·014661	1·6555147	$\bar{1}$·8216642	$\bar{2}$·1661636	58
58¼	44·8910	·022276	·66582	·014832	1·6521588	$\bar{1}$·8233568	$\bar{2}$·1711997	58¼
58½	44·5423	·022451	·66842	·015007	1·6487727	$\bar{1}$·8250494	$\bar{2}$·1762939	58½
58¾	44·1934	·022628	·67102	·015184	1·6453574	$\bar{1}$·8267355	$\bar{2}$·1813862	58¾
59	43·8438	·022808	·67362	·015364	1·6419079	$\bar{1}$·8284150	$\bar{2}$·1865043	59
59¼	43·4939	·022992	·67622	·015548	1·6384285	$\bar{1}$·8300880	$\bar{2}$·1916745	59¼
59½	43·1437	·023178	·67883	·015734	1·6349170	$\bar{1}$·8317610	$\bar{2}$·1968391	59½
59¾	42·7928	·023368	·68144	·015924	1·6313712	$\bar{1}$·8334276	$\bar{2}$·2020522	59¾
60	42·4423	·023561	·68405	·016117	1·6277987	$\bar{1}$·8350878	$\bar{2}$·2072842	60
60¼	42·0912	·023758	·68667	·016314	1·6241910	$\bar{1}$·8367481	$\bar{2}$·2125605	60¼
60½	41·7400	·023958	·68928	·016514	1·6205525	$\bar{1}$·8383957	$\bar{2}$·2178523	60½
60¾	41·3889	·024161	·69189	·016717	1·6168843	$\bar{1}$·8400371	$\bar{2}$·2231583	60¾
61	41·0378	·024368	·69451	·016924	1·6131843	$\bar{1}$·8416785	$\bar{2}$·2285030	61
61¼	40·6865	·024578	·69712	·017134	1·6094499	$\bar{1}$·8433075	$\bar{2}$·2338588	61¼
61½	40·3354	·024792	·69974	·017348	1·6056862	$\bar{1}$·8449367	$\bar{2}$·2392494	61½
61¾	39·9848	·025010	·70235	·017566	1·6018948	$\bar{1}$·8465536	$\bar{2}$·2446729	61¾
62	39·6337	·025231	·70496	·017787	1·5980651	$\bar{1}$·8481645	$\bar{2}$·2501027	62
62¼	39·2835	·025456	·70757	·018012	1·5942103	$\bar{1}$·8497694	$\bar{2}$·2555619	62¼
62½	38·9332	·025685	·71017	·018241	1·5903199	$\bar{1}$·8513623	$\bar{2}$·2610486	62½
62¾	38·5835	·025918	·71278	·018474	1·5864018	$\bar{1}$·8529555	$\bar{2}$·2665609	62¾
63	38·2342	·026155	·71538	·018711	1·5824522	$\bar{1}$·8545368	$\bar{2}$·2720970	63
63¼	37·8854	·026395	·71797	·018951	1·5784715	$\bar{1}$·8561063	$\bar{2}$·2776321	63¼
63½	37·5371	·026640	·72057	·019196	1·5744603	$\bar{1}$·8576762	$\bar{2}$·2832107	63½
63¾	37·1894	·026889	·72316	·019445	1·5704190	$\bar{1}$·8592344	$\bar{2}$·2888079	63¾
64	36·8424	·027143	·72574	·019699	1·5663479	$\bar{1}$·8607811	$\bar{2}$·2944442	64
64¼	36·4961	·027400	·72832	·019956	1·5622465	$\bar{1}$·8623222	$\bar{2}$·3000735	64¼
64½	36·1506	·027662	·73089	·020218	1·5581158	$\bar{1}$·8638520	$\bar{2}$·3057382	64½
64¾	35·8060	·027928	·73345	·020484	1·5539553	$\bar{1}$·8653705	$\bar{2}$·3114148	64¾
65	35·4622	·028199	·73601	·020755	1·5497659	$\bar{1}$·8668837	$\bar{2}$·3171227	65
65¼	35·1194	·028474	·73857	·021030	1·5455473	$\bar{1}$·8683917	$\bar{2}$·3228393	65¼
65½	34·7776	·028754	·74111	·021310	1·5412998	$\bar{1}$·8698827	$\bar{2}$·3285834	65½
65¾	34·4369	·029039	·74365	·021595	1·5370235	$\bar{1}$·8713686	$\bar{2}$·3343532	65¾
66	34·0973	·029328	·74617	·021884	1·5327196	$\bar{1}$·8728378	$\bar{2}$·3401267	66
66¼	33·7588	·029622	·74869	·022178	1·5283876	$\bar{1}$·8743020	$\bar{2}$·3459224	66¼
66½	33·4217	·029921	·75120	·022477	1·5240280	$\bar{1}$·8757556	$\bar{2}$·3517383	66½
66¾	33·0857	·030225	·75370	·022781	1·5196408	$\bar{1}$·8771985	$\bar{2}$·3575728	66¾
67	32·7512	·030533	·75619	·023089	1·5152268	$\bar{1}$·8786309	$\bar{2}$·3634051	67
67¼	32·4179	·030847	·75868	·023403	1·5107853	$\bar{1}$·8800586	$\bar{2}$·3692715	67¼
67½	32·0862	·031166	·76115	·023722	1·5063178	$\bar{1}$·8814703	$\bar{2}$·3751513	67½
67¾	31·7559	·031490	·76360	·024046	1·5018244	$\bar{1}$·8828659	$\bar{2}$·3810428	67¾
68	31·4272	·031820	·76605	·024376	1·4973051	$\bar{1}$·8842571	$\bar{2}$·3869624	68
68¼	31·1000	·032154	·76849	·024710	1·4927601	$\bar{1}$·8856382	$\bar{2}$·3928727	68¼
68½	30·7744	·032494	·77091	·025050	1·4881902	$\bar{1}$·8870037	$\bar{2}$·3988077	68½
68¾	30·4505	·032840	·77332	·025396	1·4835950	$\bar{1}$·8883592	$\bar{2}$·4047653	68¾
69	30·1284	·033191	·77572	·025747	1·4789760	$\bar{1}$·8897050	$\bar{2}$·4107266	69
69¼	29·8080	·033548	·77810	·026104	1·4743330	$\bar{1}$·8910354	$\bar{2}$·4167071	69¼
69½	29·4894	·033911	·78048	·026467	1·4696658	$\bar{1}$·8923618	$\bar{2}$·4227047	69½
69¾	29·1726	·034279	·78283	·026835	1·4649751	$\bar{1}$·8936675	$\bar{2}$·4287016	69¾

QUARTERLY TABLE :—MALES. Interest 3 per Cent.

VALUES OF ANNUITIES. SINGLE and QUARTERLY PREMIUMS which insure £1 on the LIFE of a MALE.

Age	**Present Value** of an **Annuity** of £1 payable every **Quarter** of a Year.	**Annuity** payable every **Quarter** of a Year which £1 will purchase.	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Quarterly Premium** which will insure £1 over the **Whole Term of Life.**	$\lambda\left(\frac{N_x}{D_x}\right) = \lambda A_x$	$\lambda\, \Pi_x$	$\lambda\, \pi_x$	Age
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$1 - d A_x = \Pi_x$	$a_x - d = \pi_x$				x
	£	£	£	£				
70	28·8577	·034653	·78518	·027209	1·4602616	$\bar{1}$·8949692	$\bar{2}$·4347126	70
70¼	28·5447	·035033	·78751	·027589	1·4555252	$\bar{1}$·8962561	$\bar{2}$·4407360	70¼
70½	28·2337	·035419	·78982	·027975	1·4507671	$\bar{1}$·8975281	$\bar{2}$·4467701	70½
70¾	27·9246	·035811	·79212	·028367	1·4459869	$\bar{1}$·8987910	$\bar{2}$·4528134	70¾
71	27·6176	·036209	·79441	·028765	1·4411859	$\bar{1}$·9000447	$\bar{2}$·4588644	71
71¼	27·3127	·036613	·79668	·029169	1·4363639	$\bar{1}$·9012839	$\bar{2}$·4649215	71¼
71½	27·0098	·037024	·79893	·029580	1·4315213	$\bar{1}$·9025087	$\bar{2}$·4709982	71½
71¾	26·7090	·037441	·80117	·029997	1·4266579	$\bar{1}$·9037247	$\bar{2}$·4770778	71¾
72	26·4104	·037864	·80340	·030420	1·4217754	$\bar{1}$·9049318	$\bar{2}$·4831592	72
72¼	26·1140	·038294	·80560	·030850	1·4168739	$\bar{1}$·9061195	$\bar{2}$·4892552	72¼
72½	25·8198	·038730	·80779	·031286	1·4119536	$\bar{1}$·9072985	$\bar{2}$·4953500	72½
72¾	25·5279	·039173	·80997	·031729	1·4070152	$\bar{1}$·9084689	$\bar{2}$·5014564	72¾
73	25·2381	·039623	·81212	·032179	1·4020574	$\bar{1}$·9096202	$\bar{2}$·5075725	73
73¼	24·9507	·040079	·81426	·032635	1·3970821	$\bar{1}$·9107631	$\bar{2}$·5136836	73¼
73½	24·6655	·040542	·81639	·033098	1·3920900	$\bar{1}$·9118977	$\bar{2}$·5198018	73½
73¾	24·3826	·041013	·81849	·033569	1·3870804	$\bar{1}$·9130134	$\bar{2}$·5259384	73¾
74	24·1021	·041490	·82058	·034046	1·3820554	$\bar{1}$·9141209	$\bar{2}$·5320661	74
74¼	23·8240	·041975	·82265	·034531	1·3770144	$\bar{1}$·9152151	$\bar{2}$·5382092	74¼
74½	23·5482	·042466	·82470	·035022	1·3719585	$\bar{1}$·9162960	$\bar{2}$·5443409	74½
74¾	23·2748	·042965	·82674	·035521	1·3668866	$\bar{1}$·9173690	$\bar{2}$·5504852	74¾
75	23·0038	·043471	·82876	·036027	1·3617998	$\bar{1}$·9184288	$\bar{2}$·5566281	75
75¼	22·7353	·043985	·83075	·036541	1·3566999	$\bar{1}$·9194703	$\bar{2}$·5627804	75¼
75½	22·4691	·044506	·83274	·037062	1·3515861	$\bar{1}$·9205094	$\bar{2}$·5689289	75½
75¾	22·2055	·045034	·83470	·037590	1·3464599	$\bar{1}$·9215304	$\bar{2}$·5750723	75¾
76	21·9441	·045570	·83664	·038126	1·3413184	$\bar{1}$·9225386	$\bar{2}$·5812212	76
76¼	21·6853	·046114	·83857	·038670	1·3361658	$\bar{1}$·9235393	$\bar{2}$·5873742	76¼
76½	21·4290	·046666	·84048	·039222	1·3310018	$\bar{1}$·9245274	$\bar{2}$·5935297	76½
76¾	21·1751	·047225	·84237	·039781	1·3258261	$\bar{1}$·9255029	$\bar{2}$·5996757	76¾
77	20·9237	·047793	·84424	·040349	1·3206378	$\bar{1}$·9264659	$\bar{2}$·6058328	77
77¼	20·6747	·048368	·84609	·040924	1·3154396	$\bar{1}$·9274166	$\bar{2}$·6119781	77¼
77½	20·4283	·048952	·84793	·041508	1·3102314	$\bar{1}$·9283600	$\bar{2}$·6181318	77½
77¾	20·1843	·049544	·84975	·042100	1·3050126	$\bar{1}$·9292912	$\bar{2}$·6242821	77¾
78	19·9428	·050143	·85154	·042699	1·2997869	$\bar{1}$·9302051	$\bar{2}$·6304177	78
78¼	19·7038	·050752	·85332	·043308	1·2945500	$\bar{1}$·9311119	$\bar{2}$·6365681	78¼
78½	19·4673	·051368	·85508	·043924	1·2893051	$\bar{1}$·9320067	$\bar{2}$·6427019	78½
78¾	19·2332	·051993	·85682	·044549	1·2840522	$\bar{1}$·9328896	$\bar{2}$·6488380	78¾
79	19·0016	·052627	·85855	·045183	1·2787913	$\bar{1}$·9337656	$\bar{2}$·6549751	79
79¼	18·7725	·053269	·86025	·045825	1·2735231	$\bar{1}$·9346247	$\bar{2}$·6611025	79¼
79½	18·5459	·053920	·86194	·046476	1·2682480	$\bar{1}$·9354770	$\bar{2}$·6672287	79½
79¾	18·3217	·054580	·86361	·047136	1·2629664	$\bar{1}$·9363177	$\bar{2}$·6733527	79¾
80	18·1000	·055249	·86526	·047805	1·2576788	$\bar{1}$·9371466	$\bar{2}$·6794733	80
80¼	17·8808	·055926	·86689	·048482	1·2523858	$\bar{1}$·9379640	$\bar{2}$·6855805	80¼
80½	17·6639	·056613	·86851	·049169	1·2470872	$\bar{1}$·9387748	$\bar{2}$·6916914	80½
80¾	17·4495	·057308	·87010	·049864	1·2417841	$\bar{1}$·9395692	$\bar{2}$·6977871	80¾
81	17·2376	·058013	·87168	·050569	1·2364768	$\bar{1}$·9403571	$\bar{2}$·7038844	81
81¼	17·0281	·058727	·87324	·051283	1·2311651	$\bar{1}$·9411336	$\bar{2}$·7099734	81¼
81½	16·8209	·059450	·87478	·052006	1·2258495	$\bar{1}$·9418988	$\bar{2}$·7160535	81½
81¾	16·6162	·060182	·87631	·052738	1·2205308	$\bar{1}$·9426578	$\bar{2}$·7221237	81¾
82	16·4138	·060924	·87781	·053480	1·2152092	$\bar{1}$·9434005	$\bar{2}$·7281914	82
82¼	16·2138	·061676	·87930	·054232	1·2098853	$\bar{1}$·9441371	$\bar{2}$·7342556	82¼
82½	16·0162	·062437	·88077	·054993	1·2045591	$\bar{1}$·9448625	$\bar{2}$·7403074	82½
82¾	15·8209	·063207	·88223	·055763	1·1992316	$\bar{1}$·9455818	$\bar{2}$·7463461	82¾
83	15·6280	·063988	·88366	·056544	1·1939028	$\bar{1}$·9462852	$\bar{2}$·7523865	83
83¼	15·4374	·064778	·88508	·057334	1·1885729	$\bar{1}$·9469825	$\bar{2}$·7584122	83¼
83½	15·2490	·065578	·88648	·058134	1·1832419	$\bar{1}$·9476689	$\bar{2}$·7644302	83½
83¾	15·0630	·066388	·88787	·058944	1·1779108	$\bar{1}$·9483494	$\bar{2}$·7704396	83¾

QUARTERLY TABLE:—MALES. Interest 3 per Cent.

VALUES OF ANNUITIES. SINGLE and QUARTERLY PREMIUMS which insure £1 on the LIFE of a MALE.

Age	**Present Value** of an **Annuity** of £1 payable every **Quarter of a** Year.	**Annuity** payable every **Quarter of a** Year which £1 will purchase.	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Quarterly Premium** which will insure £1 over the **Whole Term of Life.**	$\lambda\left(\frac{N_x}{D_x}\right) = \lambda A_x$	$\lambda\,\Pi_x$	$\lambda\,\pi_x$	**Age**
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$1 - d\,A_x = \Pi_x$	$a_x - d = \pi_x$				x
	£	£	£	£				
84	14·8792	·067208	·88924	·059764	1·1725805	$\bar{1}$·9490190	$\bar{2}$·7764397	84
84¼	14·6977	·068038	·89059	·060594	1·1672501	$\bar{1}$·9496778	$\bar{2}$·7824296	84¼
84½	14·5185	·068878	·89192	·061434	1·1619210	$\bar{1}$·9503259	$\bar{2}$·7884088	84½
84¾	14·3415	·069728	·89324	·062284	1·1565932	$\bar{1}$·9509682	$\bar{2}$·7943765	84¾
85	14·1666	·070588	·89454	·063144	1·1512671	$\bar{1}$·9515998	$\bar{2}$·8003321	85
85¼	13·9940	·071459	·89583	·064015	1·1459409	$\bar{1}$·9522256	$\bar{2}$·8062817	85¼
85½	13·8235	·072341	·89710	·064897	1·1406180	$\bar{1}$·9528409	$\bar{2}$·8122246	85½
85¾	13·6552	·073232	·89835	·065788	1·1352972	$\bar{1}$·9534456	$\bar{2}$·8181467	85¾
86	13·4890	·074134	·89959	·066690	1·1299803	$\bar{1}$·9540446	$\bar{2}$·8240607	86
86¼	13·3250	·075047	·90081	·067603	1·1246666	$\bar{1}$·9546332	$\bar{2}$·8299660	86¼
86½	13·1630	·075970	·90201	·068526	1·1193554	$\bar{1}$·9552114	$\bar{2}$·8358554	86½
86¾	13·0031	·076905	·90320	·069461	1·1140454	$\bar{1}$·9557839	$\bar{2}$·8417410	86¾
87	12·8453	·077849	·90438	·070405	1·1087446	$\bar{1}$·9563509	$\bar{2}$·8476035	87
87¼	12·6895	·078805	·90554	·071361	1·1034436	$\bar{1}$·9569076	$\bar{2}$·8534609	87¼
87½	12·5357	·079772	·90668	·072328	1·0981490	$\bar{1}$·9574540	$\bar{2}$·8593065	87½
87¾	12·3840	·080750	·90781	·073306	1·0928594	$\bar{1}$·9579950	$\bar{2}$·8651395	87¾
88	12·2342	·081738	·90893	·074294	1·0875749	$\bar{1}$·9585304	$\bar{2}$·8709537	88
88¼	12·0864	·082738	·91003	·075294	1·0822963	$\bar{1}$·9590557	$\bar{2}$·8767604	88¼
88½	11·9405	083748	·91111	·076304	1·0770232	$\bar{1}$·9595708	$\bar{2}$·8825473	88½
88¾	11·7966	·084770	·91218	·077326	1·0717562	$\bar{1}$·9600805	$\bar{2}$·8883255	88¾
89	11·6545	·085803	·91324	·078359	1·0664953	$\bar{1}$·9605849	$\bar{2}$.8940889	89
89¼	11·5144	·086848	·91428	·079404	1·0612412	$\bar{1}$·9610792	$\bar{2}$·8998424	89¼
89½	11·3761	·087903	·91531	·080459	1·0559940	$\bar{1}$·9615682	$\bar{2}$·9055746	89½
89¾	11·2397	·088970	·91633	·081526	1·0507541	$\bar{1}$·9620519	$\bar{2}$·9112961	89¾
90	11·1051	·090049	·91733	·082605	1·0455217	$\bar{1}$·9625256	$\bar{2}$·9170063	90
90¼	10·9723	·091139	·91832	·083695	1·0402960	$\bar{1}$·9629940	$\bar{2}$·9226995	90¼
90½	10·8412	·092240	·91930	·084796	1·0350787	$\bar{1}$·9634573	$\bar{2}$·9283754	90½
90¾	10·7120	·093354	·92026	·085910	1·0298687	$\bar{1}$·9639105	$\bar{2}$·9340437	90¾
91	10·5844	·094479	·92121	·087035	1·0246670	$\bar{1}$·9643586	$\bar{2}$·9396939	91
91¼	10·4586	·095615	·92214	·088171	1·0194745	$\bar{1}$·9647969	$\bar{2}$·9453258	91¼
91½	10·3345	’096763	·92307	·089319	1·0142908	$\bar{1}$·9652346	$\bar{2}$·9509439	91½
91¾	10·2121	·097923	·92398	·090479	1·0091155	$\bar{1}$·9656626	$\bar{2}$·9565478	91¾
92	10·0914	·099095	·92488	·091651	1·0039498	$\bar{1}$·9660854	$\bar{2}$·9621372	92
92¼	9·9723	·100278	·92576	·092834	0·9987939	$\bar{1}$·9664984	$\bar{2}$·9677071	92¼
92½	9·8547	·101474	·92664	·094030	0·9936454	$\bar{1}$·9669110	$\bar{2}$·9732664	92½
92¾	9·7389	·102681	·92750	·095237	0·9885086	$\bar{1}$·9673139	$\bar{2}$·9788057	92¾
93	9·6245	·103901	·92835	·096457	0·9833795	$\bar{1}$·9677117	$\bar{2}$·9843338	93
93¼	9·5117	·105133	·92919	·097689	0·9782599	$\bar{1}$·9681045	$\bar{2}$·9898457	93¼
93½	9·4005	·106377	·93002	·098933	0·9731530	$\bar{1}$·9684923	$\bar{2}$·9953412	93½
93¾	9·2909	·107633	·93084	·100189	0·9680563	$\bar{1}$·9688750	$\bar{1}$·0008200	93¾
94	9·1827	·108901	·93164	·101457	0·9629700	$\bar{1}$·9692481	$\bar{1}$·0062821	94
94¼	9·0760	·110181	·93244	·102737	0·9578947	$\bar{1}$·9696209	$\bar{1}$·0117269	94¼
94½	8·9708	·111473	·93322	·104029	0·9528303	$\bar{1}$·9699840	$\bar{1}$·0171545	94½
94¾	8·8670	·112778	·93399	·105334	0·9477767	$\bar{1}$·9703422	$\bar{1}$·0225686	94¾
95	8·7646	·114095	·93475	·106651	0·9427343	$\bar{1}$·9706955	$\bar{1}$·0279650	95
95¼	8·6637	·115424	·93551	·107980	0·9377030	$\bar{1}$·9710484	$\bar{1}$·0333433	95¼
95½	8·5641	·116766	·93625	·109322	0·9326834	$\bar{1}$·9713918	$\bar{1}$·0387075	95½
95¾	8·4659	·118120	·93698	·110676	0·9276755	$\bar{1}$·9717303	$\bar{1}$·0440535	95¾
96	8·3691	·119487	·93770	·112043	0·9226781	$\bar{1}$·9720639	$\bar{1}$·0493848	96
96¼	8·2736	·120867	·93841	·113423	0·9176936	$\bar{1}$·9723926	$\bar{1}$·0547011	96¼
96½	8·1794	·122259	·93911	·114815	0·9127192	$\bar{1}$·9727165	$\bar{1}$·0599987	96½
96¾	8·0865	·123664	·93980	·116220	0·9077580	$\bar{1}$·9730354	$\bar{1}$·0652809	96¾
97	7·9948	·125082	·94049	·117638	0·9028068	$\bar{1}$·9733542	$\bar{1}$·0705476	97
97¼	7·9044	·126512	·94116	·119068	0·8978665	$\bar{1}$·9736635	$\bar{1}$·0757951	97¼
97½	7·8152	·127957	·94182	·120513	0·8929375	$\bar{1}$·9739679	$\bar{1}$·0810339	97½
97¾	7·7272	·129413	·94248	·121969	0·8880222	$\bar{1}$·9742721	$\bar{1}$·0862495	97¾

QUARTERLY TABLE:—MALES. Interest 3 per Cent.

VALUES OF ANNUITIES. SINGLE and QUARTERLY PREMIUMS which insure £1 on the LIFE of a MALE.

Age	**Present Value** of an **Annuity** of £1 payable every **Quarter** of a Year.	**Annuity** payable every **Quarter** of a Year which £1 will purchase.	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Quarterly Premium** which will insure £1 over the **Whole Term of Life.**	$\lambda\left(\frac{N_x}{D_x}\right) = \lambda A_x$	$\lambda\,\Pi_x$	$\lambda\,\pi_x$	**Age**
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$1 - d\,A_x = \Pi_x$	$a_x - d = \pi_x$				x
	£	£	£	£				
98	7·6404	·130884	·94312	·123440	0·8831149	$\bar{1}$·9745670	$\bar{1}$·0914559	98
98¼	7·5548	·132367	·94376	·124923	0·8782210	$\bar{1}$·9748616	$\bar{1}$·0966424	98¼
98½	7·4703	·133864	·94439	·126420	0·8733371	$\bar{1}$·9751514	$\bar{1}$·1018158	98½
98¾	7·3869	·135374	·94501	·127930	0·8684633	$\bar{1}$·9754364	$\bar{1}$·1069724	98¾
99	7·3047	·136899	·94562	·129455	0·8636000	$\bar{1}$·9757166	$\bar{1}$·1121189	99
99¼	7·2235	·138438	·94623	·130994	0·8587449	$\bar{1}$·9759967	$\bar{1}$·1172514	99¼
99½	7·1433	·139991	·94682	·132547	0·8538984	$\bar{1}$·9762674	$\bar{1}$·1223699	99½
99¾	7·0641	·141560	·94741	·134116	0·8490593	$\bar{1}$·9765380	$\bar{1}$·1274806	99¾
100	6·9860	·143144	·94800	·135700	0·8442262	$\bar{1}$·9768083	$\bar{1}$·1325798	100
100¼	6·9087	·144745	·94857	·137301	0·8393976	$\bar{1}$·9770694	$\bar{1}$·1376737	100¼
100½	6·8324	·146362	·94914	·138918	0·8345729	$\bar{1}$·9773303	$\bar{1}$·1427585	100½
100¾	6·7569	·147997	·94970	·140553	0·8297481	$\bar{1}$·9775864	$\bar{1}$·1478401	100¾
101	6·6823	·149650	·95026	·142206	0·8249234	$\bar{1}$·9778424	$\bar{1}$·1529179	101
101¼	6·6083	·151324	·95081	·143880	0·8200918	$\bar{1}$·9780937	$\bar{1}$·1580004	101¼
101½	6·5351	·153020	·95135	·145576	0·8152527	$\bar{1}$·9783403	$\bar{1}$·1630898	101½
101¾	6·4625	·154739	·95189	·147295	0·8104011	$\bar{1}$·9785868	$\bar{1}$·1681880	101¾
102	6·3905	·156483	·95243	·149039	0·8055322	$\bar{1}$·9788331	$\bar{1}$·1732999	102
102¼	6·3188	·158258	·95296	·150814	0·8006339	$\bar{1}$·9790747	$\bar{1}$·1784416	102¼
102½	6·2474	·160066	·95349	·152622	0·7957021	$\bar{1}$·9793161	$\bar{1}$·1836171	102½
102¾	6·1762	·161911	·95402	·154467	0·7907244	$\bar{1}$·9795575	$\bar{1}$·1888357	102¾
103	6·1051	·163798	·95455	·156354	0·7856914	$\bar{1}$·9797987	$\bar{1}$·1941090	103
103¼	6·0337	·165737	·95508	·158293	0·7805810	$\bar{1}$·9800398	$\bar{1}$·1994617	103¼
103½	5·9618	·167734	·95562	·160290	0·7753801	$\bar{1}$·9802852	$\bar{1}$·2049064	103½
103¾	5·8892	·169802	·95616	·162358	0·7700562	$\bar{1}$·9805306	$\bar{1}$·2104737	103¾
104	5·8153	·171960	·95671	·164516	0·7645732	$\bar{1}$·9807803	$\bar{1}$·2162081	104
104¼	5·7399	·174219	·95727	·166775	0·7589034	$\bar{1}$·9810344	$\bar{1}$·2221310	104¼
104½	5·6625	·176600	·95785	·169156	0·7530082	$\bar{1}$·9812975	$\bar{1}$·2282874	104½
104¾	5·5824	·179134	·95844	·171690	0·7468225	$\bar{1}$·9815649	$\bar{1}$·2347450	104¾
105	5·4987	·181861	·95907	·174417	0·7402598	$\bar{1}$·9818503	$\bar{1}$·2415888	105
105¼	5·4104	·184828	·95972	·177384	0·7332317	$\bar{1}$·9821445	$\bar{1}$·2489145	105¼
105½	5·3163	·188101	·96042	·180657	0·7256095	$\bar{1}$·9824612	$\bar{1}$·2568548	105½
105¾	5·2144	·191776	·96118	·184332	0·7172062	$\bar{1}$·9828047	$\bar{1}$·2656007	105¾
106	5·1033	·195951	·96201	·188507	0·7078527	$\bar{1}$·9831796	$\bar{1}$·2753275	106
106¼	4·9809	·200766	·96292	·193322	0·6973099	$\bar{1}$·9835902	$\bar{1}$·2862813	106¼
106½	4·8436	·206458	·96394	·199014	0·6851673	$\bar{1}$·9840500	$\bar{1}$·2988836	106½
106¾	4·6863	·213387	·96511	·205943	0·6708328	$\bar{1}$·9845768	$\bar{1}$·3137470	106¾
107	4·5070	·221877	·96645	·214433	0·6538878	$\bar{1}$·9851794	$\bar{1}$·3312916	107
107¼	4·2980	·232665	·96800	·225221	0·6332683	$\bar{1}$·9858754	$\bar{1}$·3526089	107¼
107½	4·0508	·246868	·96985	·239424	0·6075361	$\bar{1}$·9867046	$\bar{1}$·3791677	107½
107¾	3·7587	·266046	·97202	·258602	0·5750434	$\bar{1}$·9876752	$\bar{1}$·4126319	107¾
108	3·4041	·293763	·97466	·286319	0·5320036	$\bar{1}$·9888531	$\bar{1}$·4568502	108
108¼	2·9723	·336437	·97787	·328993	0·4730965	$\bar{1}$·9902811	$\bar{1}$·5171867	108¼
108½	2·4441	·409153	·98181	·401709	0·3881139	$\bar{1}$·9920275	$\bar{1}$·6039115	108½
108¾	1·7949	·557130	·98664	·549686	0·2540438	$\bar{1}$·9941587	$\bar{1}$·7401146	108¾
109	·9965	1·003553	·99258	·996109	$\bar{1}$·9984596	$\bar{1}$·9967655	$\bar{1}$·9983069	109

QUARTERLY TABLE :—FEMALES. Interest 3 per Cent.

VALUES OF ANNUITIES.* SINGLE and QUARTERLY PREMIUMS which insure £1 on the LIFE of a FEMALE.

Age	**Present Value** of an **Annuity** of £1 payable every **Quarter** of a Year.	**Annuity** payable every **Quarter** of a Year which £1 will purchase.	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Quarterly Premium** which will insure £1 over the **Whole Term of Life.**	$\lambda\left(\frac{N_x}{D_x}\right) = \lambda A_x$	$\lambda \Pi_x$	$\lambda \pi_x$	Age
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$1 - d A_x = \Pi_x$	$a_x - d = \pi_x$				x
	£	£	£	£				
0	77·2703	·012942	·42479	·005498	1·8880127	$\bar{1}$·6281743	$\bar{3}$·7402047	0
0¼	82·3564	·012142	·38692	·004698	1·9156975	$\bar{1}$·5876212	$\bar{3}$·6719130	0¼
0½	84·3213	·011859	·37230	·004415	1·9259374	$\bar{1}$·5708930	$\bar{3}$·6449307	0½
0¾	86·0433	·011622	·35948	·004178	1·9347169	$\bar{1}$·5556747	$\bar{3}$·6209684	0¾
1	87·6216	·011413	·34773	·003969	1·9426111	$\bar{1}$·5412422	$\bar{3}$·5986811	1
1¼	89·1668	·011215	·33623	·003771	1·9502032	$\bar{1}$·5266365	$\bar{3}$·5764565	1¼
1½	90·3747	·011065	·32724	·003621	1·9560471	$\bar{1}$·5148664	$\bar{3}$·5588285	1½
1¾	91·3025	·010953	·32033	·003509	1·9604829	$\bar{1}$·5055976	$\bar{3}$·5451834	1¾
2	92·0136	·010868	·31504	·003424	1·9638519	$\bar{1}$·4983657	$\bar{3}$·5345338	2
2¼	92·5766	·010802	·31084	·003358	1·9665014	$\bar{1}$·4925369	$\bar{3}$·5260807	2¼
2½	93·0639	·010745	·30722	·003301	1·9687814	$\bar{1}$·4874495	$\bar{3}$·5186455	2½
2¾	93·5505	·010689	·30359	·003245	1·9710460	$\bar{1}$·4822875	$\bar{3}$·5112147	2¾
3	94·1143	·010625	·29940	·003181	1·9736554	$\bar{1}$·4762518	$\bar{3}$·5025637	3
3¼	94·4599	·010587	·29682	·003143	1·9752473	$\bar{1}$·4724932	$\bar{3}$·4973444	3¼
3½	94·7601	·010553	·29459	·003109	1·9766257	$\bar{1}$·4692180	$\bar{3}$·4926207	3½
3¾	95·0178	·010524	·29267	·003080	1·9778052	$\bar{1}$·4663782	$\bar{3}$·4885507	3¾
4	95·2358	·010500	·29105	·003056	1·9788003	$\bar{1}$·4639676	$\bar{3}$·4851533	4
4¼	95·4176	·010480	·28970	·003036	1·9796284	$\bar{1}$·4619485	$\bar{3}$·4823018	4¼
4½	95·5657	·010464	·28859	·003020	1·9803019	$\bar{1}$·4602813	$\bar{3}$·4800069	4½
4¾	95·6828	·010451	·28772	·003007	1·9808339	$\bar{1}$·4589701	$\bar{3}$·4781334	4¾
5	95·7719	·010441	·28706	·002997	1·9812379	$\bar{1}$·4579727	$\bar{3}$·4766867	5
5¼	95·8353	·010435	·28659	·002991	1·9815253	$\bar{1}$·4572610	$\bar{3}$·4758164	5¼
5½	95·8756	·010430	·28629	·002986	1·9817080	$\bar{1}$·4568062	$\bar{3}$·4750898	5½
5¾	95·8952	·010428	·28614	·002984	1·9817971	$\bar{1}$·4565786	$\bar{3}$·4747988	5¾
6	95·8965	·010428	·28613	·002984	1·9818030	$\bar{1}$·4565634	$\bar{3}$·4747988	6
6¼	95·8816	·010430	·28624	·002986	1·9817353	$\bar{1}$·4567303	$\bar{3}$·4750898	6¼
6½	95·8520	·010433	·28646	·002989	1·9816010	$\bar{1}$·4570640	$\bar{3}$·4755259	6½
6¾	95·8101	·010437	·28677	·002993	1·9814113	$\bar{1}$·4575337	$\bar{3}$·4761067	6¾
7	95·7576	·010443	·28716	·002999	1·9811731	$\bar{1}$·4581239	$\bar{3}$·4769765	7
7¼	95·7008	·010449	·28759	·003005	1·9809154	$\bar{1}$·4587738	$\bar{3}$·4778445	7¼
7½	95·6331	·010457	·28809	·003013	1·9806084	$\bar{1}$·4595282	$\bar{3}$·4789991	7½
7¾	95·5555	·010465	·28867	·003021	1·9802556	$\bar{1}$·4604017	$\bar{3}$·4801507	7¾
8	95·4683	·010475	·28932	·003031	1·9798592	$\bar{1}$·4613785	$\bar{3}$·4815859	8
8¼	95·3716	·010485	·29004	·003041	1·9794192	$\bar{1}$·4624579	$\bar{3}$·4830164	8¼
8½	95·2667	·010497	·29082	·003053	1·9789412	$\bar{1}$·4636243	$\bar{3}$·4847268	8½
8¾	95·1531	·010509	·29166	·003065	1·9784230	$\bar{1}$·4648769	$\bar{3}$·4864305	8¾
9	95·0314	·010523	·29257	·003079	1·9778672	$\bar{1}$·4662298	$\bar{3}$·4884097	9
9¼	94·9025	·010537	·29353	·003093	1·9772779	$\bar{1}$·4676525	$\bar{3}$·4903799	9¼
9½	94·7664	·010552	·29454	·003108	1·9766543	$\bar{1}$·4691443	$\bar{3}$·4924810	9½
9¾	94·6238	·010568	·29560	·003124	1·9760003	$\bar{1}$·4707044	$\bar{3}$·4947110	9¾
10	94·4746	·010585	·29672	·003141	1·9753149	$\bar{1}$·4723468	$\bar{3}$·4970679	10
10¼	94·3200	·010602	·29787	·003158	1·9746038	$\bar{1}$·4740268	$\bar{3}$·4994121	10¼
10½	94·1595	·010620	·29906	·003176	1·9738641	$\bar{1}$·4757583	$\bar{3}$·5018805	10½
10¾	93·9938	·010639	·30029	·003195	1·9730993	$\bar{1}$·4775409	$\bar{3}$·5044709	10¾
11	93·8236	·010658	·30156	·003214	1·9723119	$\bar{1}$·4793737	$\bar{3}$·5070459	11
11¼	93·6488	·010678	·30286	·003234	1·9715021	$\bar{1}$·4812419	$\bar{3}$·5097400	11¼
11½	93·4699	·010699	·30419	·003255	1·9706717	$\bar{1}$·4831449	$\bar{3}$·5125510	11½
11¾	93·2873	·010720	·30555	·003276	1·9698226	$\bar{1}$·4850823	$\bar{3}$·5153439	11¾
12	93·1016	·010741	·30694	·003297	1·9689571	$\bar{1}$·4870535	$\bar{3}$·5181189	12
12¼	92·9126	·010763	·30834	·003319	1·9680748	$\bar{1}$·4890299	$\bar{3}$·5210073	12¼
12½	92·7205	·010785	·30977	·003341	1·9671756	$\bar{1}$·4910394	$\bar{3}$·5238765	12½
12¾	92·5263	·010808	·31122	·003364	1·9662652	$\bar{1}$·4930675	$\bar{3}$·5268560	12¾
13	92·3297	·010831	·31268	·003387	1·9653413	$\bar{1}$·4951001	$\bar{3}$·5298152	13
13¼	92·1314	·010854	·31416	·003410	1·9644076	$\bar{1}$·4971509	$\bar{3}$·5327544	13¼
13½	91·9313	·010878	·31565	·003434	1·9634634	$\bar{1}$·4992058	$\bar{3}$·5358003	13½
13¾	91·7303	·010902	·31714	·003458	1·9625127	$\bar{1}$·5012510	$\bar{3}$·5388250	13¾

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* **Note.**—The value of an Annuity of £·250 payable at the commencement of every **Quarter** of a Year that the Annuitant lives, making £1 a Year, is obtained by dividing the Number in Column 2. by *four.* The **Sum Insured** is payable at the end of the Quarter of a Year of Age in which death happens.

ENGLISH LIFE TABLE, No. 3.

QUARTERLY TABLE:—Females. Interest 3 per Cent.

Values of Annuities. Single and Quarterly Premiums which insure £1 on the Life of a Female.

Age	Present Value of an Annuity of £1 payable every Quarter of a Year.	Annuity payable every Quarter of a Year which £1 will purchase.	Single Premium which will insure £1 over the Whole Term of Life.	Quarterly Premium which will insure £1 over the Whole Term of Life.	$\lambda\left(\frac{N_x}{D_x}\right) = \lambda A_x$	$\lambda \Pi_x$	$\lambda \pi_x$	Age
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$1 - d A_x = \Pi_x$	$a_x - d = \pi_x$				x
	£	£	£	£				
14	91·5277	·010926	·31865	·003482	1·9615526	$\bar{1}$·5033139	$\bar{3}$·5418288	14
14¼	91·3244	·010950	·32017	·003506	1·9605867	$\bar{1}$·5053806	$\bar{3}$·5448119	14¼
14½	91·1201	·010975	·32169	·003531	1·9596143	$\bar{1}$·5074376	$\bar{3}$·5478977	14½
14¾	90·9161	·010999	·32320	·003555	1·9586409	$\bar{1}$·5094714	$\bar{3}$·5508396	14¾
15	90·7113	·011024	·32473	·003580	1·9576615	$\bar{1}$·5115224	$\bar{3}$·5538830	15
15¼	90·5069	·011049	·32625	·003605	1·9566817	$\bar{1}$·5135505	$\bar{3}$·5569053	15¼
15½	90·3021	·011074	·32778	·003630	1·9556981	$\bar{1}$·5155825	$\bar{3}$·5599066	15½
15¾	90·0982	·011099	·32929	·003655	1·9547163	$\bar{1}$·5175785	$\bar{3}$·5628874	15¾
16	89·8950	·011124	·33081	·003680	1·9537355	$\bar{1}$·5195786	$\bar{3}$·5658478	16
16¼	89·6921	·011149	·33232	·003705	1·9527542	$\bar{1}$·5215565	$\bar{3}$·5687882	16¼
16½	89·4903	·011174	·33382	·003730	1·9517759	$\bar{1}$·5235124	$\bar{3}$·5717088	16½
16¾	89·2897	·011199	·33531	·003755	1·9508014	$\bar{1}$·5254465	$\bar{3}$·5746099	16¾
17	89·0901	·011225	·33680	·003781	1·9498295	$\bar{1}$·5273721	$\bar{3}$·5776067	17
17¼	88·8916	·011250	·33828	·003806	1·9488609	$\bar{1}$·5292763	$\bar{3}$·5804688	17¼
17½	88·6950	·011275	·33974	·003831	1·9478990	$\bar{1}$·5311467	$\bar{3}$·5833122	17½
17¾	88·4992	·011300	·34120	·003856	1·9469395	$\bar{1}$·5330090	$\bar{3}$·5861370	17¾
18	88·3056	·011324	·34264	·003880	1·9459883	$\bar{1}$·5348381	$\bar{3}$·5888317	18
18¼	88·1137	·011349	·34407	·003905	1·9450436	$\bar{1}$·5366468	$\bar{3}$·5916210	18¼
18½	87·9238	·011373	·34548	·003929	1·9441062	$\bar{1}$·5384229	$\bar{3}$·5942820	18½
18¾	87·7352	·011398	·34688	·003954	1·9431737	$\bar{1}$·5401793	$\bar{3}$·5970367	18¾
19	87·5493	·011422	·34827	·003978	1·9422525	$\bar{1}$·5419161	$\bar{3}$·5996648	19
19¼	87·3644	·011446	·34964	·004002	1·9413347	$\bar{1}$·5436211	$\bar{3}$·6022771	19¼
19½	87·1825	·011470	·35100	·004026	1·9404293	$\bar{1}$·5453071	$\bar{3}$·6048738	19½
19¾	87·0024	·011494	·35234	·004050	1·9395310	$\bar{1}$·5469620	$\bar{3}$·6074550	19¾
20	86·8241	·011518	·35367	·004074	1·9386404	$\bar{1}$·5485982	$\bar{3}$·6100210	20
20¼	86·6523	·011540	·35495	·004096	1·9377801	$\bar{1}$·5501672	$\bar{3}$·6123599	20¼
20½	86·4793	·011563	·35623	·004119	1·9369124	$\bar{1}$·5517305	$\bar{3}$·6147918	20½
20¾	86·3070	·011586	·35752	·004142	1·9360460	$\bar{1}$·5533003	$\bar{3}$·6172101	20¾
21	86·1336	·011610	·35881	·004166	1·9351727	$\bar{1}$·5548645	$\bar{3}$·6197193	21
21¼	85·9598	·011633	·36010	·004189	1·9342955	$\bar{1}$·5564231	$\bar{3}$·6221104	21¼
21½	85·7851	·011657	·36140	·004213	1·9334119	$\bar{1}$·5579881	$\bar{3}$·6245915	21½
21¾	85·6101	·011681	·36270	·004237	1·9325251	$\bar{1}$·5595476	$\bar{3}$·6270585	21¾
22	85·4349	·011705	·36401	·004261	1·9316352	$\bar{1}$·5611133	$\bar{3}$·6295115	22
22¼	85·2589	·011729	·36532	·004285	1·9307397	$\bar{1}$·5626734	$\bar{3}$·6319508	22¼
22½	85·0828	·011753	·36663	·004309	1·9298420	$\bar{1}$·5642280	$\bar{3}$·6343765	22½
22¾	84·9055	·011778	·36795	·004334	1·9289359	$\bar{1}$·5657888	$\bar{3}$·6368889	22¾
23	84·7276	·011803	·36927	·004359	1·9280251	$\bar{1}$·5673440	$\bar{3}$·6393869	23
23¼	84·5493	·011827	·37060	·004383	1·9271098	$\bar{1}$·5689054	$\bar{3}$·6417715	23¼
23½	84·3704	·011852	·37193	·004408	1·9261903	$\bar{1}$·5704612	$\bar{3}$·6442416	23½
23¾	84·1906	·011878	·37327	·004434	1·9252636	$\bar{1}$·5720231	$\bar{3}$·6467957	23¾
24	84·0104	·011903	·37461	·004459	1·9243333	$\bar{1}$·5735794	$\bar{3}$·6492375	24
24¼	83·8294	·011929	·37596	·004485	1·9233965	$\bar{1}$·5751416	$\bar{3}$·6517624	24¼
24½	83·6476	·011955	·37731	·004511	1·9224535	$\bar{1}$·5766983	$\bar{3}$·6542728	24½
24¾	83·4650	·011981	·37867	·004537	1·9215046	$\bar{1}$·5782609	$\bar{3}$·6567688	24¾
25	83·2818	·012007	·38004	·004563	1·9205498	$\bar{1}$·5798293	$\bar{3}$·6592505	25
25¼	83·0979	·012034	·38141	·004590	1·9195898	$\bar{1}$·5813921	$\bar{3}$·6618127	25¼
25½	82·9128	·012061	·38278	·004617	1·9136214	$\bar{1}$·5829492	$\bar{3}$·6643599	25½
25¾	82·7272	·012088	·38416	·004644	1·9176481	$\bar{1}$·5845121	$\bar{3}$·6668922	25¾
26	82·5412	·012115	·38555	·004671	1·9166706	$\bar{1}$·5860807	$\bar{3}$·6694099	26
26¼	82·3535	·012143	·38695	·004699	1·9156819	$\bar{1}$·5876549	$\bar{3}$·6720054	26¼
26½	82·1655	·012171	·38835	·004727	1·9146895	$\bar{1}$·5892233	$\bar{3}$·6745856	26½
26¾	81·9760	·012199	·38976	·004755	1·9136865	$\bar{1}$·5907973	$\bar{3}$·6771505	26¾
27	81·7863	·012227	·39117	·004783	1·9126805	$\bar{1}$·5923655	$\bar{3}$·6797004	27
27¼	81·5952	·012256	·39259	·004812	1·9116644	$\bar{1}$·5939392	$\bar{3}$·6823256	27¼
27½	81·4034	·012285	·39402	·004841	1·9106424	$\bar{1}$·5955183	$\bar{3}$·6849551	27½
27¾	81·2109	·012314	·39545	·004870	1·9096146	$\bar{1}$·5970916	$\bar{3}$·6875290	27¾

QUARTERLY TABLE:—FEMALES. Interest 3 per Cent.

VALUES OF ANNUITIES. SINGLE and QUARTERLY PREMIUMS which insure £1 on the LIFE of a FEMALE.

Age	**Present Value** of an **Annuity** of £1 payable every **Quarter** of a Year.	**Annuity** payable every **Quarter** of a Year which £1 will purchase.	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Quarterly Premium** which will insure £1 over the **Whole Term of Life.**	$\lambda\left(\frac{N_x}{D_x}\right) = \lambda A_x$	$\lambda \Pi_x$	$\lambda \pi_x$	Age
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$1 - d A_x = \Pi_x$	$a_x - d = \pi_x$				x
	£	£	£	£				
28	81·0173	·012343	·39689	·004899	1·9085778	$\bar{1}$·5986702	$\bar{3}$·6901074	28
28¼	80·8224	·012373	·39834	·004929	1·9075320	$\bar{1}$·6002539	$\bar{3}$·6927588	28¼
28½	80·6272	·012403	·39980	·004959	1·9064818	$\bar{1}$·6018428	$\bar{3}$·6953941	28½
28¾	80·4302	·012433	·40126	·004989	1·9054191	$\bar{1}$·6034259	$\bar{3}$·6980135	28¾
29	80·2322	·012464	·40274	·005020	1·9043485	$\bar{1}$·6050248	$\bar{3}$·7007037	29
29¼	80·0340	·012495	·40421	·005051	1·9032746	$\bar{1}$·6066071	$\bar{3}$·7033774	29¼
29½	79·8341	·012526	·40570	·005082	1·9021885	$\bar{1}$·6082050	$\bar{3}$·7060347	29½
29¾	79·6333	·012558	·40720	·005114	1·9010946	$\bar{1}$·6098078	$\bar{3}$·7087607	29¾
30	79·4314	·012589	·40870	·005145	1·8999922	$\bar{1}$·6114046	$\bar{3}$·7113854	30
30¼	79·2284	·012622	·41021	·005178	1·8988808	$\bar{1}$·6130062	$\bar{3}$·7141620	30¼
30½	79·0242	·012654	·41173	·005210	1·8977603	$\bar{1}$·6146125	$\bar{3}$·7168377	30½
30¾	78·8191	·012687	·41326	·005243	1·8966313	$\bar{1}$·6162234	$\bar{3}$·7195799	30¾
31	78·6127	·012721	·41479	·005277	1·8954929	$\bar{1}$·6178283	$\bar{3}$·7223871	31
31¼	78·4052	·012754	·41634	·005310	1·8943448	$\bar{1}$·6194481	$\bar{3}$·7250945	31¼
31½	78·1965	·012788	·41789	·005344	1·8931875	$\bar{1}$·6210620	$\bar{3}$·7278664	31½
31¾	77·9868	·012823	·41945	·005379	1·8920208	$\bar{1}$·6226802	$\bar{3}$·7307015	31¾
32	77·7758	·012857	·42102	·005413	1·8908442	$\bar{1}$·6243027	$\bar{3}$·7334380	32
32¼	77·5635	·012893	·42260	·005449	1·8896576	$\bar{1}$·6259295	$\bar{3}$·7363168	32¼
32½	77·3501	·012928	·42419	·005484	1·8884607	$\bar{1}$·6275604	$\bar{3}$·7390974	32½
32¾	77·1355	·012964	·42579	·005520	1·8872540	$\bar{1}$·6291955	$\bar{3}$·7419391	32¾
33	76·9195	·013001	·42740	·005557	1·8860367	$\bar{1}$·6308345	$\bar{3}$·7448404	33
33¼	76·7024	·013037	·42901	·005593	1·8848089	$\bar{1}$·6324674	$\bar{3}$·7476448	33¼
33½	76·4840	·013075	·43064	·005631	1·8835703	$\bar{1}$·6341144	$\bar{3}$·7505855	33½
33¾	76·2643	·013112	·43228	·005668	1·8823212	$\bar{1}$·6357651	$\bar{3}$·7534298	33¾
34	76·0433	·013150	·43392	·005706	1·8810610	$\bar{1}$·6374097	$\bar{3}$·7563318	34
34¼	75·8210	·013189	·43558	·005745	1·8797896	$\bar{1}$·6390679	$\bar{3}$·7592900	34¼
34½	75·5974	·013228	·43724	·005784	1·8785071	$\bar{1}$·6407199	$\bar{3}$·7622283	34½
34¾	75·3725	·013267	·43891	·005823	1·8772131	$\bar{1}$·6423755	$\bar{3}$·7651468	34¾
35	75·1462	·013307	·44060	·005863	1·8759072	$\bar{1}$·6440445	$\bar{3}$·7681199	35
35¼	74·9186	·013348	·44229	·005904	1·8745899	$\bar{1}$·6457071	$\bar{3}$·7711463	35¼
35½	74·6896	·013389	·44400	·005945	1·8732602	$\bar{1}$·6473830	$\bar{3}$·7741519	35½
35¾	74·4592	·013430	·44571	·005986	1·8719186	$\bar{1}$·6490524	$\bar{3}$·7771367	35¾
36	74·2275	·013472	·44744	·006028	1·8705650	$\bar{1}$·6507348	$\bar{3}$·7801732	36
36¼	73·9944	·013515	·44917	·006071	1·8691991	$\bar{1}$·6524107	$\bar{3}$·7832602	36¼
36½	73·7599	·013558	·45092	·006114	1·8678200	$\bar{1}$·6540995	$\bar{3}$·7863254	36½
36¾	73·5239	·013601	·45268	·006157	1·8664286	$\bar{1}$·6557913	$\bar{3}$·7893692	36¾
37	73·2865	·013645	·45444	·006201	1·8650237	$\bar{1}$·6574766	$\bar{3}$·7924617	37
37¼	73·0476	·013690	·45622	·006246	1·8636061	$\bar{1}$·6591743	$\bar{3}$·7956020	37¼
37½	72·8073	·013735	·45801	·006291	1·8621748	$\bar{1}$·6608750	$\bar{3}$·7987197	37½
37¾	72·5655	·013781	·45981	·006337	1·8607303	$\bar{1}$·6625784	$\bar{3}$·8018837	37¾
38	72·3222	·013827	·46162	·006383	1·8592718	$\bar{1}$·6642846	$\bar{3}$·8050248	38
38¼	72·0776	·013874	·46344	·006430	1·8578000	$\bar{1}$·6659935	$\bar{3}$·8082110	38¼
38½	71·8313	·013922	·46528	·006478	1·8563136	$\bar{1}$·6677144	$\bar{3}$·8114409	38½
38¾	71·5835	·013970	·46712	·006526	1·8548128	$\bar{1}$·6694285	$\bar{3}$·8146471	38¾
39	71·3341	·014019	·46898	·006575	1·8532972	$\bar{1}$·6711543	$\bar{3}$·8178958	39
39¼	71·0833	·014068	·47084	·006624	1·8517673	$\bar{1}$·6728734	$\bar{3}$·8211203	39¼
39½	70·8309	·014118	·47272	·006674	1·8502227	$\bar{1}$·6746040	$\bar{3}$·8243862	39½
39¾	70·5769	·014169	·47461	·006725	1·8486624	$\bar{1}$·6763369	$\bar{3}$·8276923	39¾
40	70·3214	·014220	·47652	·006776	1·8470873	$\bar{1}$·6780811	$\bar{3}$·8309734	40
40¼	70·0643	·014273	·47843	·006829	1·8454965	$\bar{1}$·6798184	$\bar{3}$·8343571	40¼
40½	69·8055	·014326	·48036	·006882	1·8438894	$\bar{1}$·6815668	$\bar{3}$·8377147	40½
40¾	69·5451	·014379	·48229	·006935	1·8422666	$\bar{1}$·6833083	$\bar{3}$·8410465	40¾
41	69·2831	·014434	·48424	·006990	1·8406275	$\bar{1}$·6850607	$\bar{3}$·8444772	41
41¼	69·0195	·014489	·48621	·007045	1·8389718	$\bar{1}$·6868239	$\bar{3}$·8478810	41¼
41½	68·7543	·014545	·48818	·007101	1·8372998	$\bar{1}$·6885800	$\bar{3}$·8513195	41½
41¾	68·4873	·014601	·49017	·007157	1·8356103	$\bar{1}$·6903467	$\bar{3}$·8547310	41¾

QUARTERLY TABLE:—FEMALES. Interest 3 per Cent.

VALUES OF ANNUITIES. SINGLE and QUARTERLY PREMIUMS which insure £1 on the LIFE of a FEMALE.

Age	Present Value of an Annuity of £1 payable every Quarter of a Year.	Annuity payable every Quarter of a Year which £1 will purchase.	Single Premium which will insure £1 over the Whole Term of Life.	Quarterly Premium which will insure £1 over the Whole Term of Life.	$\lambda\left(\frac{N_x}{D_x}\right) = \lambda A_x$	$\lambda\,\Pi_x$	$\lambda\,\pi_x$	Age
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$1 - d\,A_x = \Pi_x$	$a_x - d = \pi_x$				x
	£	£	£	£				
42	68·2187	·014659	·49217	·007215	1·8339034	$\bar{1}$·6921151	$\bar{3}$·8582363	42
42¼	67·9485	·014717	·49418	·007273	1·8321798	$\bar{1}$·6938852	$\bar{3}$·8617136	42¼
42½	67·6765	·014776	·49620	·007332	1·8304379	$\bar{1}$·6956568	$\bar{3}$·8652225	42½
42¾	67·4027	·014836	·49824	·007392	1·8286775	$\bar{1}$·6974386	$\bar{3}$·8687620	42¾
43	67·1273	·014897	·50029	·007453	1·8268994	$\bar{1}$·6992218	$\bar{3}$·8723311	43
43¼	66·8502	·014959	·50236	·007515	1·8251026	$\bar{1}$·7010151	$\bar{3}$·8759290	43¼
43½	66·5713	·015021	·50443	·007577	1·8232871	$\bar{1}$·7028009	$\bar{3}$·8794973	43½
43¾	66·2905	·015085	·50652	·007641	1·8214516	$\bar{1}$·7045966	$\bar{3}$·8831502	43¾
44	66·0081	·015150	·50862	·007706	1·8195973	$\bar{1}$·7063934	$\bar{3}$·8868290	44
44¼	65·7238	·015215	·51074	·007771	1·8177226	$\bar{1}$·7081999	$\bar{3}$·8904769	44¼
44½	65·4378	·015282	·51287	·007838	1·8158288	$\bar{1}$·7100073	$\bar{3}$·8942053	44½
44¾	65·1499	·015349	·51501	·007905	1·8139136	$\bar{1}$·7118157	$\bar{3}$·8979019	44¾
45	64·8601	·015418	·51717	·007974	1·8119779	$\bar{1}$·7136333	$\bar{3}$·9016762	45
45¼	64·5686	·015487	·51934	·008043	1·8100212	$\bar{1}$·7154518	$\bar{3}$·9054181	45¼
45½	64·2751	·015558	·52153	·008114	1·8080427	$\bar{1}$·7172793	$\bar{3}$·9092350	45½
45¾	63·9798	·015630	·52372	·008186	1·8060430	$\bar{1}$·7190992	$\bar{3}$·9130717	45¾
46	63·6826	·015703	·52594	·008259	1·8040210	$\bar{1}$·7209362	$\bar{3}$·9 69275	46
46¼	63·3835	·015777	·52816	·008333	1·8019762	$\bar{1}$·7227655	$\bar{3}$·9208014	46¼
46½	63·0823	·015852	·53040	·008408	1·7999076	$\bar{1}$·7246035	$\bar{3}$·9246927	46½
46¾	62·7793	·015929	·53266	·008485	1·7978167	$\bar{1}$·7264501	$\bar{3}$·9286518	46¾
47	62·4743	·016007	·53493	·008563	1·7957015	$\bar{1}$·7282970	$\bar{3}$·9326259	47
47¼	62·1675	·016086	·53721	·008642	1·7935635	$\bar{1}$·7301441	$\bar{3}$·9366143	47¼
47½	61·8585	·016166	·53951	·008722	1·7913995	$\bar{1}$·7319995	$\bar{3}$·9406161	47½
47¾	61·5476	·016248	·54183	·008804	1·7892109	$\bar{1}$·7338630	$\bar{3}$·9446800	47¾
48	61·2346	·016331	·54416	·008887	1·7869967	$\bar{1}$·7357265	$\bar{3}$·9487552	48
48¼	60·9195	·016415	·54651	·008971	1·7847560	$\bar{1}$·7375981	$\bar{3}$·9528409	48¼
48½	60·4629	·016539	·54990	·009095	1·7814889	$\bar{1}$·7402837	$\bar{3}$·9588027	48½
48¾	60·2831	·016588	·55124	·009144	1·7801959	$\bar{1}$·7413407	$\bar{3}$·9611362	48¾
49	59·9618	·016677	·55363	·009233	1·7778744	$\bar{1}$·7432196	$\bar{3}$·9653428	49
49¼	59·6384	·016768	·55604	·009324	1·7755261	$\bar{1}$·7451060	$\bar{3}$·9696023	49¼
49½	59·3126	·016860	·55847	·009416	1·7731472	$\bar{1}$·7469998	$\bar{3}$·9738664	49½
49¾	58·9849	·016954	·56091	·009510	1·7707405	$\bar{1}$·7488932	$\bar{3}$·9781805	49¾
50	58·6550	·017049	·56336	·009605	1·7683049	$\bar{1}$·7507860	$\bar{3}$·9824974	50
50¼	58·3227	·017146	·56584	·009702	1·7658378	$\bar{1}$·7526936	$\bar{3}$·9868613	50¼
50½	57·9883	·017245	·56832	·009801	1·7633407	$\bar{1}$·7545929	$\bar{3}$·9912704	50½
50¾	57·6515	·017346	·57083	·009902	1·7608108	$\bar{1}$·7565068	$\bar{3}$·9957229	50¾
51	57·3126	·017448	·57336	·010004	1·7582500	$\bar{1}$·7584274	$\bar{2}$·0001737	51
51¼	56·9714	·017553	·57590	·010109	1·7556565	$\bar{1}$·7603471	$\bar{2}$·0047082	51¼
51½	56·6278	·017659	·57845	·010215	1·7530293	$\bar{1}$·7622658	$\bar{2}$·0092384	51½
51¾	56·2816	·017768	·58103	·010324	1·7503667	$\bar{1}$·7641986	$\bar{2}$·0138480	51¾
52	55·9333	·017878	·58362	·010434	1·7476703	$\bar{1}$·7661302	$\bar{2}$·0184508	52
52¼	55·5824	·017991	·58624	·010547	1·7449371	$\bar{1}$·7680754	$\bar{2}$·0231289	52¼
52½	55·2292	·018106	·58886	·010662	1·7421687	$\bar{1}$·7700121	$\bar{2}$·0278387	52½
52¾	54·8734	·018224	·59151	·010780	1·7393618	$\bar{1}$·7719621	$\bar{2}$·0326188	52¾
53	54·5150	·018344	·59418	·010900	1·7365163	$\bar{1}$·7739180	$\bar{2}$·0374265	53
53¼	54·1544	·018466	·59687	·011022	1·7336340	$\bar{1}$·7758798	$\bar{2}$·0422604	53¼
53½	53·7910	·018590	·59957	·011146	1·7307097	$\bar{1}$·7778399	$\bar{2}$·0471190	53½
53¾	53·4250	·018718	·60229	·011274	1·7277448	$\bar{1}$·7798057	$\bar{2}$·0520780	53¾
54	53·0564	·018848	·60504	·011404	1·7247375	$\bar{1}$·7817841	$\bar{2}$·0570572	54
54¼	52·7015	·018975	·60768	·011531	1·7218228	$\bar{1}$·7836749	$\bar{2}$·0618670	54¼
54½	52·3465	·019103	·61032	·011659	1·7188879	$\bar{1}$·7855576	$\bar{2}$·0666613	54½
54¾	51·9914	·019234	·61297	·011790	1·7159312	$\bar{1}$·7874392	$\bar{2}$·0715138	54¾
55	51·6360	·019366	·61561	·011922	1·7129524	$\bar{1}$·7893057	$\bar{2}$·0763491	55
55¼	51·2802	·019501	·61826	·012057	1·7099499	$\bar{1}$·7911711	$\bar{2}$·0812393	55¼
55½	50·9244	·019637	·62091	·012193	1·7069257	$\bar{1}$·7930287	$\bar{2}$·0861106	55½
55¾	50·5683	·019775	·62356	·012331	1·7038780	$\bar{1}$·7948782	$\bar{2}$·0909983	55¾

QUARTERLY TABLE:—FEMALES. Interest 3 per Cent.

VALUES OF ANNUITIES. SINGLE and QUARTERLY PREMIUMS which insure £1 on the LIFE of a FEMALE.

Age	Present Value of an Annuity of £1 payable every Quarter of a Year.	Annuity payable every Quarter of a Year which £1 will purchase.	Single Premium which will insure £1 over the Whole Term of Life.	Quarterly Premium which will insure £1 over the Whole Term of Life.	$\lambda\left(\frac{N_x}{D_x}\right) = \lambda A_x$	$\lambda \Pi_x$	$\lambda \pi_x$	Age
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$1 - d A_x = \Pi_x$	$a_x - d = \pi_x$				x
	£	£	£	£				
56	50·2119	·019916	·62621	·012472	1·7008067	$\bar{1}$·7967200	$\bar{2}$·0959361	56
56¼	49·8552	·020058	·62887	·012614	1·6977101	$\bar{1}$·7985609	$\bar{2}$·1008528	56¼
56½	49·4983	·020203	·63153	·012759	1·6945907	$\bar{1}$·8003940	$\bar{2}$·1058166	56½
56¾	49·1410	·020350	·63419	·012906	1·6914441	$\bar{1}$·8022194	$\bar{2}$·1107917	56¾
57	48·7832	·020499	·63685	·013055	1·6882706	$\bar{1}$·8040372	$\bar{2}$·1157769	57
57¼	48·4254	·020650	·63951	·013206	1·6850731	$\bar{1}$·8058473	$\bar{2}$·1207713	57¼
57½	48·0673	·020804	·64218	·013360	1·6818495	$\bar{1}$·8076568	$\bar{2}$·1258065	57½
57¾	47·7087	·020961	·64485	·013517	1·6785978	$\bar{1}$·8094587	$\bar{2}$ 1308803	57¾
58	47·3501	·021119	·64752	·013675	1·6753208	$\bar{1}$·8112532	$\bar{2}$·1359273	58
58¼	46·9909	·021281	·65019	·013837	1·6720141	$\bar{1}$·8130403	$\bar{2}$·1410419	58¼
58½	46·6319	·021445	·65286	·014001	1·6686833	$\bar{1}$·8148201	$\bar{2}$·1461591	58½
58¾	46·2723	·021611	·65554	·014167	1·6653211	$\bar{1}$·8165992	$\bar{2}$·1512779	58¾
59	45·9128	·021780	·65822	·014336	1·6619333	$\bar{1}$·8183711	$\bar{2}$·1564280	59
59¼	45·5528	·021953	·66090	·014509	1·6585151	$\bar{1}$·8201358	$\bar{2}$·1616375	59¼
59½	45·1926	·022128	·66358	·014684	1·6550670	$\bar{1}$·8218933	$\bar{2}$·1668444	59½
59¾	44·8325	·022305	·66626	·014861	1·6515925	$\bar{1}$·8236437	$\bar{2}$·1720480	59¾
60	44·4723	·022486	·66894	·015042	1·6480898	$\bar{1}$·8253872	$\bar{2}$·1773056	60
60¼	44·1120	·022670	·67162	·015226	1·6445562	$\bar{1}$·8271236	$\bar{2}$·1825858	60¼
60½	43·7515	·022856	·67431	·015412	1·6409925	$\bar{1}$·8288596	$\bar{2}$·1878590	60½
60¾	43·3913	·023046	·67699	·015602	1·6374028	$\bar{1}$·8305823	$\bar{2}$·1931803	60¾
61	43·0310	·023239	·67967	·015795	1·6337814	$\bar{1}$·8322981	$\bar{2}$·1985196	61
61¼	42·6706	·023435	·68235	·015991	1·6301292	$\bar{1}$·8340072	$\bar{2}$·2038756	61¼
61½	42·3107	·023635	·68503	·016191	1·6264504	$\bar{1}$·8357096	$\bar{2}$·2092737	61½
61¾	41·9507	·023838	·68771	·016394	1·6227389	$\bar{1}$·8374053	$\bar{2}$·2146849	61¾
62	41·5910	·024044	·69039	·016600	1·6189994	$\bar{1}$·8390945	$\bar{2}$·2201081	62
62¼	41·2315	·024253	·69307	·016809	1·6152290	$\bar{1}$·8407771	$\bar{2}$·2255419	62¼
62½	40·8723	·024466	·69574	·017022	1·6114290	$\bar{1}$·8424470	$\bar{2}$·2310106	62½
62¾	40·5132	·024683	·69841	·017239	1·6075963	$\bar{1}$·8441104	$\bar{2}$·2365121	62¾
63	40·1547	·024904	·70108	·017460	1·6037359	$\bar{1}$·8457676	$\bar{2}$·2420442	63
63¼	39·7969	·025128	·70374	·017684	1·5998494	$\bar{1}$·8474122	$\bar{2}$·2475805	63¼
63½	39·4392	·025355	·70641	·017911	1·5959285	$\bar{1}$·8490568	$\bar{2}$·2531198	63½
63¾	39·0822	·025587	·70907	·018143	1·5919791	$\bar{1}$·8506891	$\bar{2}$·2587091	63¾
64	38·7258	·025823	·71172	·018379	1·5880004	$\bar{1}$·8523092	$\bar{2}$·2643219	64
64¼	38·3700	·026062	·71437	·018618	1·5839918	$\bar{1}$·8539232	$\bar{2}$·2699330	64¼
64½	38·0149	·026305	·71701	·018861	1·5799537	$\bar{1}$·8555252	$\bar{2}$·2755647	64½
64¾	37·6605	·026553	·71965	·019109	1·5758866	$\bar{1}$·8571213	$\bar{2}$·2812380	64¾
65	37·3070	·026805	·72228	·019361	1·5717899	$\bar{1}$·8587056	$\bar{2}$·2869278	65
65¼	36·9542	·027061	·72491	·019617	1·5676642	$\bar{1}$·8602841	$\bar{2}$·2926326	65¼
65½	36·6024	·027321	·72753	·019877	1·5635092	$\bar{1}$·8618509	$\bar{2}$·2983508	65½
65¾	36·2515	·027585	·73014	·020141	1·5593256	$\bar{1}$·8634061	$\bar{2}$·3040810	65¾
66	35·9016	·027854	·73274	·020410	1·5551133	$\bar{1}$·8649499	$\bar{2}$·3098430	66
66¼	35·5527	·028127	·73534	·020683	1·5508724	$\bar{1}$·8664882	$\bar{2}$·3156135	66¼
66½	35·2049	·028405	·73793	·020961	1·5466036	$\bar{1}$·8680152	$\bar{2}$·3214120	66½
66¾	34·8583	·028688	·74051	·021244	1·5423066	$\bar{1}$·8695309	$\bar{2}$·3272563	66¾
67	34·5129	·028975	·74308	·021531	1·5379817	$\bar{1}$·8710356	$\bar{2}$·3330642	67
67¼	34·1688	·029266	·74564	·021822	1·5336294	$\bar{1}$·8725292	$\bar{2}$·3388946	67¼
67½	33·8259	·029563	·74819	·022119	1·5292492	$\bar{1}$·8740119	$\bar{2}$·3447655	67½
67¾	33·4844	·029865	·75074	·022421	1·5248425	$\bar{1}$·8754896	$\bar{2}$·3506550	67¾
68	33·1443	·030171	·75327	·022727	1·5204086	$\bar{1}$·8769507	$\bar{2}$·3565421	68
68¼	32·8056	·030483	·75579	·023039	1·5159479	$\bar{1}$·8784011	$\bar{2}$·3624636	68¼
68½	32·4684	·030799	·75830	·023355	1·5114609	$\bar{1}$·8798411	$\bar{2}$·3683799	68½
68¾	32·1327	·031121	·76080	·023677	1·5069479	$\bar{1}$·8812705	$\bar{2}$·3743267	68¾
69	31·7987	·031448	·76329	·024004	1·5024091	$\bar{1}$·8826896	$\bar{2}$·3802836	69
69¼	31·4662	·031780	·76576	·024336	1·4978447	$\bar{1}$·8840927	$\bar{2}$·3862492	69¼
69½	31·1354	·032118	·76822	·024674	1·4932548	$\bar{1}$·8854856	$\bar{2}$·3922396	69½
69¾	30·8064	·032461	·77067	·025017	1·4886408	$\bar{1}$·8868685	$\bar{2}$·3982352	69¾

QUARTERLY TABLE :—Females. Interest 3 per Cent.

Values of Annuities. Single and Quarterly Premiums which insure £1 on the Life of a Female.

Age	**Present Value** of an **Annuity** of £1 payable every **Quarter** of a Year.	**Annuity** payable every **Quarter** of a Year which £1 will purchase.	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Quarterly Premium** which will insure £1 over the **Whole Term of Life.**	$\lambda\left(\frac{N_x}{D_x}\right) = \lambda A_x$	$\lambda\, \Pi_x$	$\lambda\, \pi_x$	Age
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$1 - d\, A_x = \Pi_x$	$a_x - d = \pi_x$				x
	£	£	£	£				
70	30·4791	·032809	·77311	·025365	1·4840019	$\bar{1}$·8882413	$\bar{2}$·4042349	70
70¼	30·1536	·033164	·77553	·025720	1·4793386	$\bar{1}$·8895986	$\bar{2}$·4102710	70¼
70½	29·8299	·033523	·77794	·026079	1·4746521	$\bar{1}$·8909461	$\bar{2}$·4162909	70½
70¾	29·5081	·033889	·78034	·026445	1·4699420	$\bar{1}$·8922839	$\bar{2}$·4223436	70¾
71	29·1883	·034260	·78272	·026816	1·4652085	$\bar{1}$·8936064	$\bar{2}$·4283940	71
71¼	28·8704	·034638	·78508	·027194	1·4604527	$\bar{1}$·8949139	$\bar{2}$·4344731	71¼
71½	28·5544	·035021	·78744	·027577	1·4556737	$\bar{1}$·8962175	$\bar{2}$·4405470	71½
71¾	28·2406	·035410	·78977	·027966	1·4508732	$\bar{1}$·8975006	$\bar{2}$·4466304	71¾
72	27·9287	·035805	·79209	·028361	1·4460511	$\bar{1}$·8987745	$\bar{2}$·4527215	72
72¼	27·6189	·036207	·79440	·028763	1·4412068	$\bar{1}$·9000392	$\bar{2}$·4588342	72¼
72½	27·3113	·036615	·79669	·029171	1·4363426	$\bar{1}$·9012894	$\bar{2}$·4649513	72½
72¾	27·0058	·037029	·79896	·029585	1·4314568	$\bar{1}$·9025250	$\bar{2}$·4710716	72¾
73	26·7025	·037450	·80122	·030006	1·4265518	$\bar{1}$·9037518	$\bar{2}$·4772081	73
73¼	26·4013	·037877	·80346	·030433	1·4216261	$\bar{1}$·9049643	$\bar{2}$·4833448	73¼
73½	26·1025	·038310	·80569	·030866	1·4166822	$\bar{1}$·9061680	$\bar{2}$·4894804	73½
73¾	25·8059	·038751	·80790	·031307	1·4117188	$\bar{1}$·9073576	$\bar{2}$·4956415	73¾
74	25·5116	·039198	·81009	·031754	1·4067374	$\bar{1}$·9085333	$\bar{2}$·5017984	74
74¼	25·2196	·039652	·81226	·032208	1·4017379	$\bar{1}$·9096951	$\bar{2}$·5079638	74¼
74½	24·9299	·040112	·81442	·032668	1·3967206	$\bar{1}$·9108484	$\bar{2}$·5141225	74½
74¾	24·6425	·040580	·81656	·033136	1·3916854	$\bar{1}$·9119881	$\bar{2}$·5203001	74¾
75	24·3575	·041055	·81868	·033611	1·3866329	$\bar{1}$·9131142	$\bar{2}$·5264814	75
75¼	24·0748	·041537	·82078	·034093	1·3815631	$\bar{1}$·9142268	$\bar{2}$·5326652	75¼
75½	23·7946	·042026	·82287	·034582	1·3764787	$\bar{1}$·9153312	$\bar{2}$·5388501	75½
75¾	23·5169	·042523	·82494	·035079	1·3713803	$\bar{1}$·9164224	$\bar{2}$·5450472	75¾
76	23·2415	·043026	·82699	·035582	1·3662644	$\bar{1}$·9175003	$\bar{2}$·5512304	76
76¼	22·9686	·043538	·82902	·036094	1·3611338	$\bar{1}$·9185650	$\bar{2}$·5574350	76¼
76½	22·6981	·044057	·83103	·036613	1·3559897	$\bar{1}$·9196167	$\bar{2}$·5636353	76½
76¾	22·4301	·044583	·83303	·037139	1·3508305	$\bar{1}$·9206606	$\bar{2}$·5698302	76¾
77	22·1646	·045117	·83500	·037673	1·3456600	$\bar{1}$·9216865	$\bar{2}$·5760302	77
77¼	21·9015	·045659	·83696	·038215	1·3404743	$\bar{1}$·9227047	$\bar{2}$·5822339	77¼
77½	21·6410	·046209	·83890	·038765	1·3352778	$\bar{1}$·9237102	$\bar{2}$·5884398	77½
77¾	21·3830	·046766	·84082	·039322	1·3300692	$\bar{1}$·9247030	$\bar{2}$·5946356	77¾
78	21·1275	·047332	·84272	·039888	1·3248472	$\bar{1}$·9256833	$\bar{2}$·6008423	78
78¼	20·8744	·047906	·84461	·040462	1·3196137	$\bar{1}$·9266562	$\bar{2}$·6070473	78¼
78½	20·6239	·048487	·84647	·041043	1·3143710	$\bar{1}$·9276116	$\bar{2}$·6132391	78½
78¾	20·3760	·049077	·84832	·041633	1·3091179	$\bar{1}$·9285597	$\bar{2}$·6194377	78¾
79	20·1304	·049676	·85015	·042232	1·3038533	$\bar{1}$·9294956	$\bar{2}$·6256416	79
79¼	19·8875	·050283	·85195	·042839	1·2985797	$\bar{1}$·9304141	$\bar{2}$·6318393	79¼
79½	19·6470	·050898	·85374	·043454	1·2932957	$\bar{1}$·9313256	$\bar{2}$·6380298	79½
79¾	19·4090	·051522	·85552	·044078	1·2880040	$\bar{1}$·9322302	$\bar{2}$·6442219	79¾
80	19·1736	·052155	·85727	·044711	1·2827040	$\bar{1}$·9331176	$\bar{2}$·6504144	80
80¼	18·9407	·052796	·85900	·045352	1·2773962	$\bar{1}$·9339932	$\bar{2}$·6565964	80¼
80½	18·7103	·053446	·86072	·046002	1·2720809	$\bar{1}$·9348619	$\bar{2}$·6627767	80½
80¾	18·4824	·054106	·86241	·046662	1·2667586	$\bar{1}$·9357138	$\bar{2}$·6689633	80¾
81	18·2570	·054774	·86409	·047330	1·2614295	$\bar{1}$·9365590	$\bar{2}$·6751365	81
81¼	18·0341	·055451	·86575	·048007	1·2560940	$\bar{1}$·9373925	$\bar{2}$·6813046	81¼
81½	17·8137	·056137	·86739	·048693	1·2507531	$\bar{1}$·9382144	$\bar{2}$·6874665	81½
81¾	17·5957	·056832	·86901	·049388	1·2454068	$\bar{1}$·9390248	$\bar{2}$·6936214	81¾
82	17·3802	·057537	·87062	·050093	1·2400550	$\bar{1}$·9398286	$\bar{2}$·6997770	82
82¼	17·1672	·058251	·87220	·050807	1·2346987	$\bar{1}$·9406161	$\bar{2}$·7059236	82¼
82½	16·9566	·058974	·87377	·051530	1·2293385	$\bar{1}$·9413971	$\bar{2}$·7120601	82½
82¾	16·7485	·059707	·87532	·052263	1·2239747	$\bar{1}$·9421669	$\bar{2}$·7181943	82¾
83	16·5427	·060450	·87685	·053006	1·2186072	$\bar{1}$·9429253	$\bar{2}$·7243250	83
83¼	16·3394	·061202	·87837	·053758	1·2132369	$\bar{1}$·9436775	$\bar{2}$·7304431	83¼
83½	16·1385	·061964	·87986	·054520	1·2078636	$\bar{1}$·9444136	$\bar{2}$·7365558	83½
83¾	15·9400	·062735	·88134	·055291	1·2024881	$\bar{1}$·9451435	$\bar{2}$·7426544	83¾

QUARTERLY TABLE:—FEMALES. Interest 3 per Cent.

VALUES OF ANNUITIES. SINGLE and QUARTERLY PREMIUMS which insure **£1** on the LIFE of a FEMALE.

Age	**Present Value** of an **Annuity** of £1 payable every **Quarter** of a Year.	**Annuity** payable every **Quarter** of a Year which £1 will purchase.	**Single Premium** which will insure £1 over the **Whole Term of Life.**	**Quarterly Premium** which will insure £1 over the **Whole Term of Life.**	$\lambda\left(\frac{N_x}{D_x}\right) = \lambda A_x$	$\lambda \Pi_x$	$\lambda \pi_x$	**Age**
x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$1 - d A_x = \Pi_x$	$a_x - d = \pi_x$				x
	£	£	£	£				
84	15.7438	·063517	·88280	·056073	1·1971102	$\bar{1}$·9458623	$\bar{2}$·7487538	84
84¼	15·5500	·064309	·88424	·056865	1·1917309	$\bar{1}$·9465702	$\bar{2}$·7548450	84¼
84½	15·3586	·065110	·88567	·057666	1·1863515	$\bar{1}$·9472719	$\bar{2}$·7609198	84½
84¾	15·1695	·065922	·88708	·058478	1·1809708	$\bar{1}$·9479628	$\bar{2}$·7669925	84¾
85	14·9827	·066744	·88847	·059300	1·1755900	$\bar{1}$·9486428	$\bar{2}$·7730547	85
85¼	14·7982	·067576	·88984	·060132	1·1702089	$\bar{1}$·9493119	$\bar{2}$·7791056	85¼
85½	14·6160	·068418	·89120	·060974	1·1648279	$\bar{1}$·9499752	$\bar{2}$·7851447	85½
85¾	14·4360	·069271	·89254	·061827	1·1594479	$\bar{1}$·9506277	$\bar{2}$·7911782	85¾
86	14·2583	·070134	·89386	·062690	1·1540684	$\bar{1}$·9512695	$\bar{2}$·7971983	86
86¼	14·0829	·071008	·89516	·063564	1·1486912	$\bar{1}$·9519007	$\bar{2}$·8032112	86¼
86½	13·9096	·071893	.89645	·064449	1·1433144	$\bar{1}$·9525261	$\bar{2}$·8092162	86½
86¾	13·7386	·072788	·89773	·065344	1·1379411	$\bar{1}$·9531457	$\bar{2}$·8152057	86¾
87	13·5697	·073694	·89899	·066250	1·1325696	$\bar{1}$·9537549	$\bar{2}$·8211859	87
87¼	13·4030	·074610	·90023	·067166	1·1272017	$\bar{1}$·9543535	$\bar{2}$·8271495	87¼
87½	13·2384	·075538	·90145	·068094	1·1218362	$\bar{1}$·9549416	$\bar{2}$·8331088	87½
87¾	13·0760	·076476	·90266	·069032	1·1164758	$\bar{1}$·9555242	$\bar{2}$·8390505	87¾
88	12·9156	·077426	·90385	·069982	1·1111159	$\bar{1}$·9560964	$\bar{2}$·8449863	88
88¼	12·7574	·078386	·90503	·070942	1·1057605	$\bar{1}$·9566630	$\bar{2}$·8509034	88¼
88½	12·6011	·079358	·90620	·071914	1·1004096	$\bar{1}$·9572241	$\bar{2}$·8568134	88½
88¾	12·4470	·080341	·90734	·072897	1·0950637	$\bar{1}$·9577701	$\bar{2}$·8627097	88¾
89	12·2948	·081335	·90848	·073891	1·0897226	$\bar{1}$·9583154	$\bar{2}$·8685915	89
89¼	12·1447	·082340	·90959	·074896	1·0843868	$\bar{1}$·9588457	$\bar{2}$·8744586	89¼
89½	11·9965	·083357	·91070	·075913	1·0790564	$\bar{1}$·9593753	$\bar{2}$·8803162	89½
89¾	11·8504	·084386	·91178	·076942	1·0737313	$\bar{1}$·9598901	$\bar{2}$·8861635	89¾
90	11·7061	·085425	·91286	·077981	1·0684127	$\bar{1}$·9604042	$\bar{2}$·8919888	90
90¼	11·5638	·086477	·91392	·079033	1·0631005	$\bar{1}$·9609082	$\bar{2}$·8978085	90¼
90½	11·4234	·087540	·91496	·080096	1·0577944	$\bar{1}$·9614021	$\bar{2}$·9036108	90½
90¾	11·2848	·088615	·91599	·081171	1·0524952	$\bar{1}$·9618907	$\bar{2}$·9094009	90¾
91	11·1481	·089701	·91701	·082257	1·0472028	$\bar{1}$·9623741	$\bar{2}$·9151729	91
91¼	11·0133	·090799	·91802	·083355	1·0419179	$\bar{1}$·9628521	$\bar{2}$·9209317	91¼
91½	10·8803	·091909	·91901	·084465	1·0366407	$\bar{1}$·9633202	$\bar{2}$·9266768	91½
91¾	10·7491	·093031	.91998	·085587	1·0313718	$\bar{1}$·9637784	$\bar{2}$·9324078	91¾
92	10·6196	·094165	·92095	·086721	1·0261098	$\bar{1}$·9642361	$\bar{2}$·9381243	92
92¼	10·4920	·095311	·92190	·087867	1·0208565	$\bar{1}$·9646838	$\bar{2}$·9438258	92¼
92½	10·3660	·096469	·92283	·089025	1·0156121	$\bar{1}$·9651217	$\bar{2}$·9495120	92½
92¾	10·2418	·097639	·92376	·090195	1·0103755	$\bar{1}$·9655592	$\bar{2}$·9551825	92¾
93	10·1193	·098822	·92467	·091378	1·0051485	$\bar{1}$·9659868	2·9608416	93
93¼	9·9984	·100016	·92557	·092572	0·9999306	$\bar{1}$·9664093	$\bar{2}$·9664796	93¼
93½	9·8792	·101222	·92646	·093778	0·9947233	$\bar{1}$·9668267	$\bar{2}$·9721010	93½
93¾	9·7616	·102442	·92733	·094998	0·9895230	$\bar{1}$·9672343	$\bar{2}$·9777145	93¾
94	9·6457	·103673	·92820	·096229	0·9843333	$\bar{1}$·9676416	2·9833060	94
94¼	9·5313	·104917	·92905	·097473	0·9791540	$\bar{1}$·9680391	$\bar{2}$·9888843	94¼
94½	9·4185	·106174	·92989	·098730	0·9739836	$\bar{1}$·9684316	$\bar{2}$·9944491	94½
94¾	9·3073	·107442	·93071	·099998	0·9688240	$\bar{1}$·9688144	$\bar{2}$·9999913	94¾
95	9·1976	·108724	·93153	·101280	0·9636744	$\bar{1}$·9691968	$\bar{1}$·0055237	95
95¼	9·0894	·110018	·93234	·102574	0·9585352	$\bar{1}$·9695743	$\bar{1}$·0110373	95¼
95½	8·9827	·111325	·93313	·103881	0·9534066	$\bar{1}$·9699422	$\bar{1}$·0165361	95½
95¾	8·8775	·112645	·93391	·105201	0·9482883	$\bar{1}$·9703050	$\bar{1}$·0220198	95¾
96	8·7737	·113977	·93469	·106533	0·9431811	$\bar{1}$·9706676	$\bar{1}$·0274842	96
96¼	8·6713	·115323	·93545	·107879	0·9380844	$\bar{1}$·9710206	$\bar{1}$·0329370	96¼
96½	8·5704	·116681	·93620	·109237	0·9329989	$\bar{1}$·9713686	$\bar{1}$·0383698	96½
96¾	8·4708	·118053	·93694	·110609	0·9279239	$\bar{1}$·9717118	$\bar{1}$·0437905	96¾
97	8·3726	·119437	·93767	·111993	0·9228602	$\bar{1}$·9720500	$\bar{1}$·0491909	97
97¼	8·2757	·120835	·93839	·113391	0·9178070	$\bar{1}$·9723834	$\bar{1}$·0545786	97¼
97½	8·1802	·122246	·93911	·114802	0·9127640	$\bar{1}$·9727165	$\bar{1}$·0599495	97½
97¾	8·0860	·123671	·93981	·116227	0·9077311	1·9730401	$\bar{1}$·0653070	97¾

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x	$\frac{N_x}{D_x} = A_x$	$\frac{D_x}{N_x} = a_x$	$1 - d\,A_x = \Pi_x$	$a_x - d = \pi_x$				x
	£	£	£	£				
98	7·9930	·125110	·94050	·117666	0·9027093	$\bar{1}$·9733588	$\bar{1}$·0706511	98
98¼	7·9013	·126562	·94118	·119118	0·8976975	$\bar{1}$·9736727	$\bar{1}$·0759774	98¼
98½	7·8108	·128028	·94186	·120584	0·8926937	$\bar{1}$·9739864	$\bar{1}$·0812897	98½
98¾	7·7214	·129510	·94252	·122066	0·8876976	$\bar{1}$·9742906	$\bar{1}$·0865947	98¾
99	7·6333	·131005	·94318	·123561	0·8827110	$\bar{1}$·9745946	$\bar{1}$·0918814	99
99¼	7·5463	·132516	·94382	·125072	0·8777319	$\bar{1}$·9748892	$\bar{1}$·0971601	99¼
99½	7·4603	·134042	·94446	·126598	0·8727586	$\bar{1}$·9751836	$\bar{1}$·1024268	99½
99¾	7·3755	·135584	·94510	·128140	0·8677920	$\bar{1}$·9754778	$\bar{1}$·1076847	99¾
100	7·2917	·137142	·94572	·129698	0·8628296	$\bar{1}$·9757626	$\bar{1}$·1129333	100
100¼	7·2089	·138717	·94634	·131273	0·8578702	$\bar{1}$·9760472	$\bar{1}$·1181754	100¼
100½	7·1271	·140310	·94694	·132866	0·8529107	$\bar{1}$·9763225	$\bar{1}$·1234138	100½
100¾	7·0461	·141922	·94755	·134478	0·8479496	$\bar{1}$·9766021	$\bar{1}$·1286512	100¾
101	6·9660	·143554	·94814	·136110	0·8429843	$\bar{1}$·9768725	$\bar{1}$·1338900	101
101¼	6·8867	·145208	·94873	·137764	0·8380106	$\bar{1}$·9771426	$\bar{1}$·1391357	101¼
101½	6·8081	·146885	·94932	·139441	0·8330230	$\bar{1}$·9774126	$\bar{1}$·1443905	101½
101¾	6·7300	·148588	·94990	·141144	0·8280176	$\bar{1}$·9776779	$\bar{1}$·1496624	101¾
102	6·6525	·150318	·95048	·142874	0·8229878	$\bar{1}$·9779430	$\bar{1}$·1549532	102
102¼	6·5754	·152081	·95105	·144637	0·8179248	$\bar{1}$·9782033	$\bar{1}$·1602794	102¼
102½	6·4986	·153879	·95162	·146435	0·8128216	$\bar{1}$·9784636	$\bar{1}$·1656449	102½
102¾	6·4219	·155717	·95219	·148273	0·8076639	$\bar{1}$·9787236	$\bar{1}$·1710621	102¾
103	6·3451	·157602	·95277	·150158	0·8024389	$\bar{1}$·9789881	$\bar{1}$·1765485	103
103¼	6·2680	·159541	·95334	·152097	0·7971274	$\bar{1}$·9792478	$\bar{1}$·1821207	103¼
103½	6·1903	·161543	·95392	·154099	0·7917130	$\bar{1}$·9795120	$\bar{1}$·1877998	103½
103¾	6·1117	·163620	·95450	·156176	0·7861637	$\bar{1}$·9797759	$\bar{1}$·1936143	103¾
104	6·0319	·165787	·95510	·158343	0·7804505	$\bar{1}$·9800488	$\bar{1}$·1995989	104
104¼	5·9501	·168064	·95571	·160620	0·7745254	$\bar{1}$·9803261	$\bar{1}$·2057996	104¼
104½	5·8660	·170474	·95633	·163030	0·7683414	$\bar{1}$·9806078	$\bar{1}$·2122675	104½
104¾	5·7789	·173044	·95698	·165600	0·7618430	$\bar{1}$·9809029	$\bar{1}$·2190603	104¾
105	5·6876	·175820	·95766	·168376	0·7549327	$\bar{1}$·9812113	$\bar{1}$·2262802	105
105¼	5·5915	·178842	·95838	·171398	0·7475305	$\bar{1}$·9815377	$\bar{1}$·2340057	105¼
105½	5·4889	·182187	·95914	·174743	0·7394822	$\bar{1}$·9818820	$\bar{1}$·2423998	105½
105¾	5·3784	·185929	·95996	·178485	0·7306518	$\bar{1}$·9822531	$\bar{1}$·2516018	105¾
106	5·2579	·190190	·96086	·182746	0·7208123	$\bar{1}$·9826601	$\bar{1}$·2618479	106
106¼	5·1246	·195139	·96185	·187695	0·7096560	$\bar{1}$·9831073	$\bar{1}$·2734527	106¼
106½	4·9758	·200972	·96296	·193528	0·6968645	$\bar{1}$·9836082	$\bar{1}$·2867438	106½
106¾	4·8073	·208015	·96421	·200571	0·6819050	$\bar{1}$·9841716	$\bar{1}$·3022682	106¾
107	4·6140	·216731	·96565	·209287	0·6640787	$\bar{1}$·9848197	$\bar{1}$·3207423	107
107¼	4·3900	·227791	·96732	·220347	0·6424636	$\bar{1}$·9855702	$\bar{1}$·3431072	107¼
107½	4·1286	·242213	·96927	·234769	0·6158020	$\bar{1}$·9864448	$\bar{1}$·3706408	107½
107¾	3·8193	·261826	·97157	·254382	0·5819871	$\bar{1}$·9874741	$\bar{1}$·4054864	107¾
108	3·4496	·289891	·97432	·282447	0·5377652	$\bar{1}$·9887016	$\bar{1}$·4509370	108
108¼	3·0066	·332602	·97762	·325158	0·4780754	$\bar{1}$·9901701	$\bar{1}$·5120944	108¼
108½	2·4693	·404981	·98162	·397537	0·3925655	$\bar{1}$·9919434	$\bar{1}$·5993775	108½
108¾	1·8134	·551462	·98650	·544018	0·2584848	$\bar{1}$·9940971	$\bar{1}$·7356133	108¾
109	1·0028	·997226	·99254	·989782	0·0012065	$\bar{1}$·9967480	$\bar{1}$·9955396	109

NOTE.

In the Quarterly Life Table the Interest is convertible quarterly, and the v at 3 per Cent. is derived thus :—

$$\text{Interest 3 per Cent. ; } \lambda v = \lambda \frac{1}{1+\frac{\cdot 03}{4}} \text{ or } \lambda \frac{4}{4\cdot 03} = 9\cdot 9967549{,}45186853 \text{ ; } v = \cdot 99255583$$

and

$$1 - v = d = \cdot 00744417 \text{ ; } \lambda d = \bar{3}\cdot 8718163$$

$$\text{or } \lambda d = \lambda \frac{3}{403} = \bar{3}\cdot 8718163$$

JOINT LIVES.

MALE AND FEMALE LIFE.

Interest **3** per Cent.

JOINT LIVES:—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of **Female** (y)	0			1			2	
Age of **Male** (x)	$\lambda\ D_{x,\,0}$	$\lambda\ N_{x,\,0}$	**Age** of **Male** (x)	$\lambda\ D_{x,\,1}$	$\lambda\ N_{x,\,1}$	**Age** of **Male** (x)	$\lambda\ D_{x,\,2}$	$\lambda\ N_{x,\,2}$
0	6·3977003	7·5111602	0	6·3284421	7·4939657	0	6·2942645	7·4805787
1	6·3136981	7·4928829	1	6·2444399	7·4763577	1	6·2102623	7·4632376
2	6·2784172	7·4794378	2	6·2091590	7·4631397	2	6·1749814	7·4501203
3	6·2563039	7·4673850	3	6·1870457	7·4512017	3	6·1528681	7·4382400
4	6·2394022	7·4559300	4	6·1701440	7·4398165	4	6·1359664	7·4268950
5	6·2251748	7·4447840	5	6·1559166	7·4287161	5	6·1217390	7·4158252
6	6·2128136	7·4338085	6	6·1435554	7·4177685	6	6·1093778	7·4049016
7	6·2016701	7·4229054	7	6·1324119	7·4068819	7	6·0982343	7·3940339
8	6·1912559	7·4120097	8	6·1219977	7·3959940	8	6·0878201	7·3831615
9	6·1815085	7·4010833	9	6·1122503	7·3850676	9	6·0780727	7·3722472
10	6·1722733	7·3900881	10	6·1030151	7·3740658	10	6·0688375	7·3612544
11	6·1634088	7·3789915	11	6·0941506	7·3629573	11	6·0599730	7·3501527
12	6·1547868	7·3677667	12	6·0855286	7·3517163	12	6·0513510	7·3389167
13	6·1462923	7·3563924	13	6·0770341	7·3403223	13	6·0428565	7·3275262
14	6·1378234	7·3448513	14	6·0685652	7·3287595	14	6·0343876	7·3159655
15	6·1292916	7·3331308	15	6·0600334	7·3170156	15	6·0258558	7·3042235
16	6·1206213	7·3212224	16	6·0513631	7·3050835	16	6·0171855	7·2922924
17	6·1117505	7·3091214	17	6·0424923	7·2929581	17	6·0083147	7·2801685
18	6·1026300	7·2968264	18	6·0333718	7·2806390	18	5·9991942	7·2678502
19	6·0932242	7·2843387	19	6·0239660	7·2681281	19	5·9897884	7·2553399
20	6·0835104	7·2716628	20	6·0142522	7·2554291	20	5·9800746	7·2426418
21	6·0734792	7·2588048	21	6·0042210	7·2425481	21	5·9700434	7·2297620
22	6·0633676	7·2457754	22	5·9941094	7·2294940	22	5·9599318	7·2167071
23	6·0531783	7·2325685	23	5·9839201	7·2162599	23	5·9497425	7·2034716
24	6·0429131	7·2191775	24	5·9736549	7·2028400	24	5·9394773	7·1900489
25	6·0325730	7·2055957	25	5·9633148	7·1892267	25	5·9291372	7·1764319
26	6·0221581	7·1918153	26	5·9528999	7·1754123	26	5·9187223	7·1626125
27	6·0116677	7·1778279	27	5·9424095	7·1613887	27	5·9082319	7·1485827
28	6·0011002	7·1636247	28	5·9318420	7·1471465	28	5·8976644	7·1343327
29	5·9904534	7·1491960	29	5·9211952	7·1326758	29	5·8870176	7·1198531
30	5·9797240	7·1345319	30	5·9104658	7·1179666	30	5·8762882	7·1051336
31	5·9689080	7·1196207	31	5·8996498	7·1030076	31	5·8654722	7·0901625
32	5·9580005	7·1044513	32	5·8887423	7·0877864	32	5·8545647	7·0749279
33	5·9469958	7·0890106	33	5·8777376	7·0722911	33	5·8435600	7·0594172
34	5·9358874	7·0732860	34	5·8666292	7·0565081	34	5·8324516	7·0436172
35	5·9246679	7·0572628	35	5·8554097	7·0404224	35	5·8212321	7·0275131
36	5·9133291	7·0409263	36	5·8440709	7·0240196	36	5·8098933	7·0110894
37	5·9018619	7·0242607	37	5·8326037	7·0072829	37	5·7984261	6·9943306
38	5·8902565	7·0072487	38	5·8209983	6·9901957	38	5·7868207	6·9772186
39	5·8785021	6·9898729	39	5·8092439	6·9727396	39	5·7750663	6·9597358
40	5·8665873	6·9721138	40	5·7973291	6·9548956	40	5·7631515	6·9418626
41	5·8544996	6·9539518	41	5·7852414	6·9366428	41	5·7510638	6·9235785
42	5·8422258	6·9353650	42	5·7729676	6·9179599	42	5·7387900	6·9048611
43	5·8297518	6·9163310	43	5·7604936	6·8988234	43	5·7263160	6·8856878
44	5·8170629	6·8968251	44	5·7478047	6·8792086	44	5·7136271	6·8660330
45	5·8041432	6·8768214	45	5·7348850	6·8590894	45	5·7007074	6·8458704
46	5·7909762	6·8562921	46	5·7217180	6·8384369	46	5·6875404	6·8251716
47	5·7775445	6·8352072	47	5·7082863	6·8172207	47	5·6741087	6·8039052
48	5·7638299	6·8135342	48	5·6945717	6·7954084	48	5·6603941	6·7820385
49	5·7498133	6·7912387	49	5·6805551	6·7729641	49	5·6463775	6·7595361
50	5·7354749	6·7682816	50	5·6662167	6·7498492	50	5·6320391	6·7363583
51	5·7207939	6·7446213	51	5·6515357	6·7260209	51	5·6173581	6·7124631
52	5·7055042	6·7202094	52	5·6362460	6·7014324	52	5·6020684	6·6878029
53	5·6897697	6·6950201	53	5·6205115	6·6760555	53	5·5863339	6·6623490
54	5·6735731	6·6690072	54	5·6043149	6·6498421	54	5·5701373	6·6360529

JOINT LIVES:—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	0			1			2	
Age of Male (x)	λ $D_{x,\,0}$	λ $N_{x,\,0}$	Age of Male (x)	λ $D_{x,\,1}$	λ $N_{x,\,1}$	Age of Male (x)	λ $D_{x,\,2}$	λ $N_{x,\,2}$
55	5·6568872	6·6421181	55	5·5876290	6·6227394	55	5·5534514	6·6088607
56	5·6396743	6·6142954	56	5·5704161	6·5946882	56	5·5362385	6·5807135
57	5·6218863	6·5854752	57	5·5526281	6·5656242	57	5·5184505	6·5515458
58	5·6034648	6·5555882	58	5·5342066	6·5354769	58	5·5000290	6·5212871
59	5·5843412	6·5245589	59	5·5150830	6·5041700	59	5·4809054	6·4898604
60	5·5644364	6·4923056	60	5·4951782	6·4716209	60	5·4610006	6·4571829
61	5·5436611	6·4587403	61	5·4744029	6·4377409	61	5·4402253	6·4231654
62	5·5219156	6·4237679	62	5·4526574	6·4024343	62	5·4184798	6·3877121
63	5·4990899	6·3872877	63	5·4298317	6·3655988	63	5·3956541	6·3507205
64	5·4750637	6·3491901	64	5·4058055	6·3271259	64	5·3716279	6·3120806
65	5·4497063	6·3093601	65	5·3804481	6·2868982	65	5·3462705	6·2716769
66	5·4228767	6·2676740	66	5·3536185	6·2447926	66	5·3194409	6·2293841
67	5·3944236	6·2240001	67	5·3251654	6·2006770	67	5·2909878	6·1850714
68	5·3641855	6·1781985	68	5·2949273	6·1544116	68	5·2607497	6·1385986
69	5·3319902	6·1301227	69	5·2627320	6·1058476	69	5·2285544	6·0898169
70	5·2976556	6·0796146	70	5·2283974	6·0548298	70	5·1942198	6·0385697
71	5·2609890	6·0265092	71	5·1917308	6·0011909	71	5·1575532	5·9846925
72	5·2217874	5·9706318	72	5·1525292	5·9447570	72	5·1183516	5·9280096
73	5·1798377	5·9117977	73	5·1105795	5·8853443	73	5·0764019	5·8683370
74	5·1349161	5·8498118	74	5·0656579	5·8227576	74	5·0314803	5·8054825
75	5·0867888	5·7844711	75	5·0175306	5·7567935	75	4·9833530	5·7392406
76	5·0352114	5·7155597	76	4·9659532	5·6872382	76	4·9317756	5·6693986
77	4·9799295	5·6428546	77	4·9106713	5·6138673	77	4·8764937	5·5957322
78	4·9206781	5·5661187	78	4·8514199	5·5364457	78	4·8172423	5·5180074
79	4·8571820	5·4851064	79	4·7879238	5·4547280	79	4·7537462	5·4359786
80	4·7891556	5·3995594	80	4·7198974	5·3684578	80	4·6857198	5·3493901
81	4·7163030	5·3092096	81	4·6470448	5·2773667	81	4·6128672	5·2579750
82	4·6383179	5·2137778	82	4·5690597	5·1811762	82	4·5348821	5·1614542
83	4·5548840	5·1129715	83	4·4856258	5·0795977	83	4·4514482	5·0595385
84	4·4656742	5·0064897	84	4·3964160	4·9723269	84	4·3622384	4·9519288
85	4·3703514	4·8940174	85	4·3010932	4·8590536	85	4·2669156	4·8383100
86	4·2685680	4·7752288	86	4·1993098	4·7394521	86	4·1651322	4·7183605
87	4·1599662	4·6497865	87	4·0907080	4·6131862	87	4·0565304	4·5917434
88	4·0441778	4·5173411	88	3·9749196	4·4799077	88	3·9407420	4·4581117
89	3·9208244	4·3775325	89	3·8515662	4·3392574	89	3·8173886	4·3171068
90	3·7895169	4·2299860	90	3·7202587	4·1908631	90	3·6860811	4·1683563
91	3·6498564	4·0743171	91	3·5805982	4·0343397	91	3·5464206	4·0114766
92	3·5014333	3·9101253	92	3·4321751	3·8692898	92	3·3979975	3·8460691
93	3·3438278	3·7369977	93	3·2745696	3·6952995	93	3·2403920	3·6717225
94	3·1766097	3·5545037	94	3·1073515	3·5119395	94	3·0731739	3·4880061
95	2·9993386	3·3621913	95	2·9300804	3·3187573	95	2·8959028	3·2944669
96	2·8115637	3·1595801	96	2·7423055	3·1152703	96	2·7081279	3·0906213
97	2·6128238	2·9461451	97	2·5435656	2·9009458	97	2·5093880	2·8759359
98	2·4026475	2·7212812	98	2·3333893	2·6751704	98	2·2992117	2·6497875
99	2·1805531	2·4842358	99	2·1112949	2·4371685	99	2·0771173	2·4113941
100	1·9460483	2·2339660	100	1·8767901	2·1858427	100	1·8426125	2·1596360
101	1·6986308	1·9687943	101	1·6293726	1·9194155	101	1·5951950	1·8926894
102	1·4377878	1·6855886	102	1·3685296	1·6345347	102	1·3343520	1·6071128
103	1·1629962	1·3775503	103	1·0937380	1·3238809	103	1·0595604	1·2954043
104	0·8737226	1·0269580	104	0·8044644	0·9684316	104	0·7702868	0·9380942
105	0·5694232		105	0·5007650		105	0·4659874	
106	0·2495440		106	0·1802858		106	0·1461082	
107	9·9135206		107	9·8442624		107	9·8100848	
108	9·5607783		108	9·4915201		108	9·4573425	
109	9·1907320		109	9·1214738		109	9·0872962	

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of Female (y)	3		4			5		
Age of Male (x)	λ $D_{x,3}$	λ $N_{x,3}$	Age of Male (x)	λ $D_{x,4}$	λ $N_{x,4}$	Age of Male (x)	λ $D_{x,5}$	λ $N_{x,5}$
0	6·2722013	7·4685397	0	6·2551537	7·4571068	0	6·2409873	7·4460005
1	6·1881991	7·4513364	1	6·1711515	7·4399873	1	6·1569851	7·4289333
2	6·1529182	7·4382785	2	6·1358706	7·4269712	2	6·1217042	7·4159484
3	6·1308049	7·4264375	3	6·1137573	7·4151615	3	6·0995909	7·4041657
4	6·1139032	7·4151237	4	6·0968556	7·4038752	4	6·0826892	7·3929049
5	6·0996758	7·4040804	5	6·0826282	7·3928574	5	6·0684618	7·3819118
6	6·0873146	7·3931802	6	6·0702670	7·3819810	6	6·0561006	7·3710598
7	6·0761711	7·3823336	7	6·0591235	7·3711570	7	6·0449571	7·3602597
8	6·0657569	7·3714805	8	6·0487093	7·3603256	8	6·0345429	7·3494521
9	6·0560095	7·3605836	9	6·0389619	7·3494497	9	6·0247955	7·3385993
10	6·0467743	7·3496070	10	6·0297267	7·3384929	10	6·0155603	7·3276654
11	6·0379098	7·3385199	11	6·0208622	7·3274251	11	6·0066958	7·3166201
12	6·0292878	7·3272976	12	6·0122402	7·3162214	12	5·9980738	7·3054381
13	6·0207933	7·3159200	13	6·0037457	7·3048616	13	5·9895793	7·2940997
14	6·0123244	7·3043716	14	5·9952768	7·2933307	14	5·9811104	7·2825898
15	6·0037926	7·2926408	15	5·9867450	7·2816172	15	5·9725786	7·2708970
16	5·9951223	7·2807211	16	5·9780747	7·2697137	16	5·9639083	7·2590142
17	5·9862515	7·2686080	17	5·9692039	7·2576172	17	5·9550375	7·2469376
18	5·9771310	7·2563008	18	5·9600834	7·2453261	18	5·9459170	7·2346663
19	5·9677252	7·2438013	19	5·9506776	7·2328427	19	5·9365112	7·2222025
20	5·9580114	7·2311134	20	5·9409638	7·2201709	20	5·9267974	7·2095503
21	5·9479802	7·2182437	21	5·9309326	7·2073163	21	5·9167662	7·1967149
22	5·9378686	7·2051985	22	5·9208210	7·1942860	22	5·9066546	7·1837031
23	5·9276793	7·1919716	23	5·9106317	7·1810738	23	5·8964653	7·1705090
24	5·9174141	7·1785571	24	5·9003665	7·1676729	24	5·8862001	7·1571263
25	5·9070740	7·1649471	25	5·8900264	7·1540763	25	5·8758600	7·1435469
26	5·8966591	7·1511344	26	5·8796115	7·1402760	26	5·8654451	7·1297637
27	5·8861687	7·1371100	27	5·8691211	7·1262639	27	5·8549547	7·1157676
28	5·8756012	7·1228651	28	5·8585536	7·1120303	28	5·8443872	7·1015502
29	5·8649544	7·1083894	29	5·8479068	7·0975658	29	5·8337404	7·0871010
30	5·8542250	7·0936731	30	5·8371774	7·0828596	30	5·8230110	7·0724098
31	5·8434090	7·0787040	31	5·8263614	7·0679003	31	5·8121950	7·0574654
32	5·8325015	7·0634711	32	5·8154539	7·0526763	32	5·8012875	7·0422554
33	5·8214968	7·0479610	33	5·8044492	7·0371746	33	5·7902828	7·0267673
34	5·8103884	7·0321601	34	5·7933408	7·0213817	34	5·7791744	7·0109874
35	5·7991689	7·0160544	35	5·7821213	7·0052831	35	5·7679549	6·9949019
36	5·7878301	6·9996279	36	5·7707825	6·9888633	36	5·7566161	6·9784943
37	5·7763629	6·9828653	37	5·7593153	6·9721063	37	5·7451489	6·9617495
38	5·7647575	6·9657486	38	5·7477099	6·9549948	38	5·7335435	6·9446495
39	5·7530031	6·9482594	39	5·7359555	6·9375105	39	5·7217891	6·9271762
40	5·7410883	6·9303789	40	5·7240407	6·9196333	40	5·7098743	6·9093102
41	5·7290006	6·9120858	41	5·7119530	6·9013433	41	5·6977866	6·8910301
42	5·7167268	6·8933587	42	5·6996792	6·8826180	42	5·6855128	6·8723146
43	5·7042528	6·8741732	43	5·6872052	6·8634340	43	5·6730388	6·8531397
44	5·6915639	6·8545053	44	5·6745163	6·8437659	44	5·6603499	6·8334806
45	5·6786442	6·8343274	45	5·6615966	6·8235875	45	5·6474302	6·8133098
46	5·6654772	6·8136114	46	5·6484296	6·8028692	46	5·6342632	6·7925993
47	5·6520455	6·7923262	47	5·6349979	6·7815807	47	5·6208315	6·7713173
48	5·6383309	6·7704384	48	5·6212833	6·7596886	48	5·6071169	6·7494310
49	5·6243143	6·7479120	49	5·6072667	6·7371563	49	5·5931003	6·7269041
50	5·6099759	6·7247085	50	5·5929283	6·7139449	50	5·5787619	6·7036971
51	5·5952949	6·7007845	51	5·5782473	6·6900121	51	5·5640809	6·6797671
52	5·5800052	6·6760936	52	5·5629576	6·6653104	52	5·5487912	6·6550680
53	5·5642707	6·6506052	53	5·5472231	6·6398099	53	5·5330567	6·6295683
54	5·5480741	6·6242714	54	5·5310265	6·6134612	54	5·5168601	6·6032198

JOINT LIVES:—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	3		4			5		
Age of Male (x)	λ $D_{x,\,3}$	λ $N_{x,\,3}$	Age of Male (x)	λ $D_{x,\,4}$	λ $N_{x,\,4}$	Age of Male (x)	λ $D_{x,\,5}$	λ $N_{x,\,5}$
55	5·5313882	6·5970380	55	5·5143406	6·5862106	55	5·5001742	6·5759672
56	5·5141753	6·5688452	56	5·4971277	6·5579982	56	5·4829613	6·5477512
57	5·4963873	6·5396278	57	5·4793397	6·5287581	57	5·4651733	6·5185060
58	5·4779658	6·5093145	58	5·4609182	6·4984194	58	5·4467518	6·4881599
59	5·4588422	6·4778286	59	5·4417946	6·4669045	59	5·4276282	6·4566356
60	5·4389374	6·4450866	60	5·4218898	6·4341304	60	5·4077234	6·4238495
61	5·4181621	6·4109991	61	5·4011145	6·4000070	61	5·3869481	6·3897119
62	5·3964166	6·3754703	62	5·3793690	6·3644384	62	5·3652026	6·3541264
63	5·3735909	6·3383973	63	5·3565433	6·3273217	63	5·3423769	6·3169899
64	5·3495647	6·2996707	64	5·3325171	6·2885475	64	5·3183507	6·2781926
65	5·3242073	6·2591733	65	5·3071597	6·2479983	65	5·2929933	6·2376179
66	5·2973777	6·2167814	66	5·2803301	6·2055500	66	5·2661637	6·1951408
67	5·2689246	6·1723624	67	5·2518770	6·1610708	67	5·2377106	6·1506294
68	5·2386865	6·1257775	68	5·2216389	6·1144202	68	5·2074725	6·1039439
69	5·2064912	6·0768778	69	5·1894436	6·0654514	69	5·1752772	6·0549354
70	5·1721566	6·0255067	70	5·1551090	6·0140062	70	5·1409126	6·0034489
71	5·1354900	5·9714980	71	5·1184424	5·9599200	71	5·1042760	5·9493173
72	5·0962884	5·9146790	72	5·0792408	5·9030178	72	5·0650744	5·8923668
73	5·0543387	5·8548645	73	5·0372911	5·8431169	73	5·0231247	5·8324137
74	5·0094171	5·7918611	74	4·9923695	5·7800235	74	4·9782031	5·7692652
75	4·9612898	5·7254666	75	4·9442422	5·7135336	75	4·9300758	5·7027182
76	4·9097124	5·6554663	76	4·8926648	5·6434357	76	4·8784984	5·6325586
77	4·8544305	5·5816373	77	4·8373829	5·5695051	77	4·8232165	5·5585650
78	4·7951791	5·5037449	78	4·7781315	5·4915087	78	4·7639651	5·4805024
79	4·7316830	5·4215450	79	4·7146354	5·4092011	79	4·7004690	5·3981269
80	4·6636566	5·3347813	80	4·6466090	5·3223278	80	4·6324426	5·3111830
81	4·5908040	5·2431879	81	4·5737564	5·2306219	81	4·5595900	5·2194053
82	4·5128189	5·1464868	82	4·4957713	5·1338065	82	4·4816049	5·1225154
83	4·4293850	5·0443880	83	4·4123374	5·0315927	83	4·3981710	5·0202263
84	4·3401752	4·9365911	84	4·3231276	4·9236791	84	4·3089612	4·9122375
85	4·2448524	4·8227871	85	4·2278048	4·8097549	85	4·2136384	4·7982362
86	4·1430690	4·7026485	86	4·1260214	4·6894989	86	4·1118550	4·6779006
87	4·0344672	4·5758434	87	4·0174196	4·5625735	87	4·0032532	4·5508983
88	3·9186788	4·4420218	88	3·9016312	4·4286328	88	3·8874648	4·4168787
89	3·7953254	4·3008271	89	3·7782778	4·2873187	89	3·7641114	4·2754859
90	3·6640179	4·1518878	90	3·6469703	4·1382598	90	3·6328039	4·1263483
91	3·5243574	3·9948194	91	3·5073098	3·9810725	91	3·4931434	3·9690831
92	3·3759343	3·8292247	92	3·3588867	3·8153599	92	3·3447203	3·8032925
93	3·2183288	3·6546904	93	3·2012812	3·6407090	93	3·1871148	3·6285646
94	3·0511107	3·4707882	94	3·0340631	3·4566894	94	3·0198967	3·4444680
95	2·8738396	3·2770643	95	2·8567920	3·2628498	95	2·8426256	3·2505520
96	2·6860647	3·0730336	96	2·6690171	3·0587035	96	2·6548507	3·0463298
97	2·4873248	2·8581611	97	2·4702772	2·8437135	97	2·4561108	2·8312636
98	2·2771485	2·6318231	98	2·2601009	2·6172552	98	2·2459345	2·6047259
99	2·0550541	2·3932259	99	2·0380065	2·3785342	99	2·0238401	2·3659202
100	1·8205493	2·1412462	100	1·8035017	2·1264120	100	1·7893353	2·1137061
101	1·5731318	1·8740316	101	1·5560842	1·8590308	101	1·5419178	1·8462128
102	1·3122888	1·5880946	102	1·2952412	1·5728716	102	1·2810748	1·5599090
103	1·0374972	1·2758455	103	1·0204496	1·2602837	103	1·0062832	1·2471087
104	0·7482236	0·9176473	104	0·7311760	0·9015346	104	0·7170096	0·8879997
105	0·4439242		105	0·4268766		105	0·4127102	
106	0·1240450		106	0·1069974		106	0·0928310	
107	9·7880216		107	9·7709740		107	9·7568076	
108	9·4352793		108	9·4182317		108	9·4040653	
109	9·0652330		109	9·0481854		109	9·0340190	

ENGLISH LIFE TABLE, No. 3.

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of **Female** (*y*)	6		7			8		
Age of **Male** (*x*)	λ $D_{x,6}$	λ $N_{x,6}$	**Age** of **Male** (*x*)	λ $D_{x,7}$	λ $N_{x,7}$	**Age** of **Male** (*x*)	λ $D_{x,8}$	λ $N_{x,8}$
0	6·2287638	7·4350674	0	6·2177380	7·4242029	0	6·2073585	7·4133405
1	6·1447616	7·4180312	1	6·1337358	7·4071838	1	6·1233563	7·3963300
2	6·1094807	7·4050710	2	6·0984549	7·3942435	2	6·0880754	7·3834062
3	6·0873674	7·3933119	3	6·0763416	7·3825064	3	6·0659621	7·3716892
4	6·0704657	7·3820751	4	6·0594399	7·3712927	4	6·0490604	7·3604985
5	6·0562383	7·3711067	5	6·0452125	7·3603485	5	6·0348330	7·3495785
6	6·0438771	7·3602793	6	6·0328513	7·3495466	6	6·0224718	7·3388020
7	6·0327336	7·3495042	7	6·0217078	7·3387970	7	6·0113283	7·3280792
8	6·0223194	7·3387216	8	6·0112936	7·3280406	8	6·0009141	7·3173497
9	6·0125720	7·3278938	9	6·0015462	7·3172393	9	5·9911667	7·3065760
10	6·0033368	7·3169848	10	5·9923110	7·3063568	10	5·9819315	7·2957212
11	5·9944723	7·3059641	11	5·9834465	7·2953625	11	5·9730670	7·2847549
12	5·9858503	7·2948067	12	5·9748245	7·2842315	12	5·9644150	7·2736516
13	5·9773558	7·2834926	13	5·9663300	7·2729436	13	5·9559505	7·2623915
14	5·9688869	7·2720062	14	5·9578611	7·2614832	14	5·9474816	7·2509590
15	5·9603551	7·2603372	15	5·9493293	7·2498396	15	5·9389498	7·2393428
16	5·9516848	7·2484775	16	5·9406590	7·2380054	16	5·9302795	7·2275358
17	5·9428140	7·2364239	17	5·9317882	7·2259770	17	5·9214087	7·2155342
18	5·9336935	7·2241753	18	5·9226677	7·2137534	18	5·9122882	7·2033375
19	5·9242877	7·2117338	19	5·9132619	7·2013365	19	5·9028824	7·1909471
20	5·9145739	7·1991038	20	5·9035481	7·1887309	20	5·8931686	7·1783673
21	5·9045427	7·1862903	21	5·8935169	7·1759413	21	5·8831374	7·1656040
22	5·8944311	7·1733002	22	5·8834053	7·1629749	22	5·8730258	7·1526631
23	5·8842418	7·1601272	23	5·8732160	7·1498255	23	5·8628365	7·1395391
24	5·8739766	7·1467647	24	5·8629508	7·1364859	24	5·8525713	7·1262249
25	5·8636365	7·1332061	25	5·8526107	7·1229498	25	5·8422312	7·1127132
26	5·8532216	7·1194427	26	5·8421958	7·1092089	26	5·8318163	7·0989965
27	5·8427312	7·1054662	27	5·8317054	7·0952545	27	5·8213259	7·0850664
28	5·8321637	7·0912678	28	5·8211379	7·0810776	28	5·8107584	7·0709129
29	5·8215169	7·0768374	29	5·8104911	7·0666684	29	5·8001116	7·0565272
30	5·8107875	7·0621648	30	5·7997617	7·0520168	30	5·7893822	7·0418982
31	5·7999715	7·0472383	31	5·7889457	7·0371108	31	5·7785662	7·0270151
32	5·7890640	7·0320461	32	5·7780382	7·0219390	32	5·7676587	7·0118656
33	5·7780593	7·0165754	33	5·7670335	7·0064884	33	5·7566540	6·9964370
34	5·7669509	7·0008126	34	5·7559251	6·9907456	34	5·7455456	6·9807162
35	5·7557314	6·9847437	35	5·7447056	6·9746962	35	5·7343261	6·9646884
36	5·7443926	6·9683531	36	5·7333668	6·9583247	36	5·7229873	6·9483385
37	5·7329254	6·9516241	37	5·7218996	6·9416155	37	5·7115201	6·9316504
38	5·7213200	6·9345401	38	5·7102942	6·9245501	38	5·6999147	6·9146068
39	5·7095656	6·9170826	39	5·6985398	6·9071115	39	5·6881603	6·8971889
40	5·6976508	6·8992319	40	5·6866250	6·8892794	40	5·6762455	6·8793778
41	5·6855631	6·8809674	41	5·6745373	6·8710333	41	5·6641578	6·8611527
42	5·6732893	6·8622666	42	5·6622635	6·8523514	42	5·6518840	6·8424916
43	5·6608153	6·8431063	43	5·6497895	6·8332093	43	5·6394100	6·8233709
44	5·6481264	6·8234615	44	5·6371006	6·8135826	44	5·6267211	6·8037648
45	5·6352067	6·8033051	45	5·6241809	6·7934442	45	5·6138014	6·7836474
46	5·6220397	6·7826080	46	5·6110139	6·7727653	46	5·6006344	6·7629892
47	5·6086080	6·7613396	47	5·5975822	6·7515144	47	5·5872027	6·7417595
48	5·5948934	6·7394661	48	5·5838676	6·7296587	48	5·5734881	6·7199243
49	5·5808768	6·7169515	49	5·5698510	6·7071614	49	5·5594715	6·6974481
50	5·5665384	6·6937567	50	5·5555126	6·6839837	50	5·5451331	6·6742910
51	5·5518574	6·6698384	51	5·5408316	6·6600828	51	5·5304521	6·6504106
52	5·5365677	6·6451500	52	5·5255419	6·6354112	52	5·5151624	6·6257601
53	5·5208332	6·6196607	53	5·5098074	6·6099380	53	5·4994279	6·6003077
54	5·5046366	6·5933215	54	5·4936108	6·5836149	54	5·4832313	6·5740048

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of Female (y)	6			7			8	
Age of Male (x)	$\lambda D_{x,6}$	$\lambda N_{x,6}$	Age of Male (x)	$\lambda D_{x,7}$	$\lambda N_{x,7}$	Age of Male (x)	$\lambda D_{x,8}$	$\lambda N_{x,8}$
55	5·4879507	6·5660779	55	5·4769249	6·5563867	55	5·4665454	6·5467971
56	5·4707378	6·5378692	56	5·4597120	6·5281934	56	5·4493325	6·5186237
57	5·4529498	6·5086305	57	5·4419240	6·4989684	57	5·4315445	6·4894189
58	5·4345283	6·4782896	58	5·4235025	6·4686410	58	5·4131230	6·4591103
59	5·4154047	6·4467689	59	5·4043789	6·4371330	59	5·3939994	6·4276211
60	5·3954999	6·4139847	60	5·3844741	6·4043605	60	5·3740946	6·3948670
61	5·3747246	6·3798474	61	5·3636988	6·3702334	61	5·3533193	6·3607575
62	5·3529791	6·3442604	62	5·3419533	6·3346554	62	5·3315738	6·3251960
63	5·3301534	6·3071205	63	5·3191276	6·2975233	63	5·3087481	6·2880795
64	5·3061272	6·2683177	64	5·2951014	6·2587265	64	5·2847219	6·2492977
65	5·2807698	6·2277348	65	5·2697440	6·2181485	65	5·2593645	6·2087329
66	5·2539402	6·1852480	66	5·2429144	6·1756640	66	5·2325349	6·1662608
67	5·2254871	6·1407242	67	5·2144613	6·1311415	67	5·2040818	6·1217486
68	5·1952490	6·0940237	68	5·1842232	6·0844401	68	5·1738437	6·0750567
69	5·1630537	6·0449982	69	5·1520279	6·0354118	69	5·1416484	6·0260361
70	5·1287191	5·9934904	70	5·1176933	5·9838995	70	5·1073138	5·9745301
71	5·0920525	5·9393370	71	5·0810267	5·9297376	71	5·0706472	5·9203733
72	5·0528509	5·8823611	72	5·0418251	5·8727534	72	5·0314456	5·8633901
73	5·0109012	5·8223799	73	4·9998754	5·8127609	73	4·9894959	5·8033988
74	4·9659796	5·7592010	74	4·9549538	5·7495680	74	4·9445743	5·7402050
75	4·9178523	5·6926208	75	4·9068265	5·6829720	75	4·8964470	5·6736058
76	4·8662749	5·6224267	76	4·8552491	5·6127598	76	4·8448696	5·6033884
77	4·8109930	5·5483946	77	4·7999672	5·5387086	77	4·7895877	5·5293302
78	4·7517416	5·4702926	78	4·7407158	5·4605837	78	4·7303363	5·4511972
79	4·6882455	5·3878753	79	4·6772197	5·3781429	79	4·6668402	5·3687448
80	4·6202191	5·3008882	80	4·6091933	5·2911301	80	4·5988138	5·2817197
81	4·5473665	5·2090649	81	4·5363407	5·1992797	81	4·5259612	5·1898554
82	4·4693814	5·1121292	82	4·4583556	5·1023151	82	4·4479761	5·0928746
83	4·3859475	5·0097911	83	4·3749217	4·9999479	83	4·3645422	4·9904902
84	4·2967377	4·9017530	84	4·2857119	4·8918774	84	4·2753324	4·8824022
85	4·2014149	4·7877034	85	4·1903891	4·7777950	85	4·1800096	4·7682983
86	4·0996315	4·6673175	86	4·0886057	4·6573772	86	4·0782262	4·6478591
87	3·9910297	4·5402623	87	3·9800039	4·5302876	87	3·9696244	4·5207488
88	3·8752413	4·4061918	88	3·8642155	4·3961829	88	3·8538360	4·3866211
89	3·7518879	4·2647477	89	3·7408621	4·2547037	89	3·7304826	4·2451187
90	3·6205804	4·1155589	90	3·6095546	4·1054802	90	3·5991751	4·0958704
91	3·4809199	3·9582418	91	3·4698941	3·9481282	91	3·4595146	3·9384942
92	3·3324968	3·7924001	92	3·3214710	3·7822511	92	3·3110915	3·7725924
93	3·1748913	3·6176209	93	3·1638655	3·6074368	93	3·1534860	3·5977533
94	3·0076732	3·4334754	94	2·9966474	3·4232560	94	2·9862679	3·4135464
95	2·8304021	3·2395082	95	2·8193763	3·2292548	95	2·8089968	3·2195195
96	2·6426272	3·0352356	96	2·6316014	3·0249473	96	2·6212219	3·0151865
97	2·4438873	2·8201193	97	2·4328615	2·8097960	97	2·4224820	2·8000087
98	2·2337110	2·5935308	98	2·2226852	2·5831716	98	2·2123057	2·5733567
99	2·0116166	2·3546692	99	2·0005908	2·3442723	99	1·9902113	2·3344288
100	1·7771118	2·1023935	100	1·7660860	2·0919524	100	1·7557065	2·0820766
101	1·5296943	1·8348262	101	1·5186685	1·8243322	101	1·5082890	1·8144148
102	1·2688513	1·5484238	102	1·2578255	1·5378594	102	1·2474460	1·5278876
103	0·9940597	1·2354880	103	0·9830339	1·2248204	103	0·9726544	1·2147671
104	0·7047861	0·8761659	104	0·6937603	0·8653527	104	0·6833808	0·8551677
105	0·4004867		105	0·3894609		105	0·3790814	
106	0·0806075		106	0·0695817		106	0·0592022	
107	9·7445841		107	9·7335583		107	9·7231788	
108	9·3918418		108	9·3808160		108	9·3704365	
109	9·0217955		109	9·0107697		109	9·0003902	

JOINT LIVES:—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of **Female** (y)	9			10			11	
Age of **Male** (x)	$\lambda D_{x,9}$	$\lambda N_{x,9}$	**Age** of **Male** (x)	$\lambda D_{x,10}$	$\lambda N_{x,10}$	**Age** of **Male** (x)	$\lambda D_{x,11}$	$\lambda N_{x,11}$
0	6·1975894	7·4024463	0	6·1882870	7·3914845	0	6·1793198	7·3804251
1	6·1135872	7·3854358	1	6·1042848	7·3744668	1	6·0953176	7·3633942
2	6·0783063	7·3725256	2	6·0690039	7·3615678	2	6·0600367	7·3505045
3	6·0561930	7·3608277	3	6·0468906	7·3498877	3	6·0379234	7·3388412
4	6·0392913	7·3496588	4	6·0299889	7·3387401	4	6·0210217	7·3277146
5	6·0250639	7·3387630	5	6·0157615	7·3278684	5	6·0067943	7·3168664
6	6·0127027	7·3280120	6	6·0034003	7·3171433	6	5·9944331	7·3061672
7	6·0015592	7·3173160	7	5·9922568	7·3064744	7	5·9832896	7·2955257
8	5·9911450	7·3066146	8	5·9818126	7·2958012	8	5·9728754	7·2848811
9	5·9813976	7·2958691	9	5·9720952	7·2850850	9	5·9631280	7·2741946
10	5·9721624	7·2850433	10	5·9628600	7·2742888	10	5·9538928	7·2634291
11	5·9632979	7·2741061	11	5·9539955	7·2633818	11	5·9450283	7·2525528
12	5·9546759	7·2630322	12	5·9453735	7·2523383	12	5·9364063	7·2415407
13	5·9461814	7·2518014	13	5·9368790	7·2411379	13	5·9279118	7·2303720
14	5·9377125	7·2403980	14	5·9284101	7·2297652	14	5·9194429	7·2190307
15	5·9291807	7·2288111	15	5·9198783	7·2182085	15	5·9109111	7·2075059
16	5·9205104	7·2170329	16	5·9112080	7·2064608	16	5·9022408	7·1957896
17	5·9116396	7·2050601	17	5·9023372	7·1945179	17	5·8933700	7·1838783
18	5·9025191	7·1928915	18	5·8932167	7·1823793	18	5·8842495	7·1717706
19	5·8931133	7·1805293	19	5·8838109	7·1700469	19	5·8748437	7·1594692
20	5·8833995	7·1679778	20	5·8740971	7·1575244	20	5·8651299	7·1469775
21	5·8733683	7·1552415	21	5·8640659	7·1448179	21	5·8550987	7·1343014
22	5·8632567	7·1423282	22	5·8539543	7·1319332	22	5·8449871	7·1214476
23	5·8530674	7·1292313	23	5·8437650	7·1188650	23	5·8347978	7·1084090
24	5·8428022	7·1159439	24	5·8331998	7·1056056	24	5·8245326	7·0951799
25	5·8324621	7·1024587	25	5·8231597	7·0921489	25	5·8141925	7·0817522
26	5·8220472	7·0887682	26	5·8127448	7·0784858	26	5·8037776	7·0681186
27	5·8115568	7·0748632	27	5·8022544	7·0646085	27	5·7932872	7·0542701
28	5·8009893	7·0607356	28	5·7916869	7·0505078	28	5·7827197	7·0401980
29	5·7903425	7·0463751	29	5·7810401	7·0361741	29	5·7720729	7·0258922
30	5·7796131	7·0317708	30	5·7703107	7·0215956	30	5·7613435	7·0113421
31	5·7687971	7·0169118	31	5·7594947	7·0067635	31	5·7505275	6·9965366
32	5·7578896	7·0017866	32	5·7485872	6·9916635	32	5·7396200	6·9814641
33	5·7468849	6·9863821	33	5·7375825	6·9762845	33	5·7286153	6·9661117
34	5·7357765	6·9706849	34	5·7264741	6·9606125	34	5·7175069	6·9504663
35	5·7245570	6·9546806	35	5·7152546	6·9446331	35	5·7062874	6·9345131
36	5·7132182	6·9383541	36	5·7039158	6·9283314	36	5·6949486	6·9182371
37	5·7017510	6·9216890	37	5·6924486	6·9116909	37	5·6834814	6·9016225
38	5·6901456	6·9046683	38	5·6808432	6·8946946	38	5·6718760	6·8846518
39	5·6783912	6·8872737	39	5·6690888	6·8773242	39	5·6601216	6·8673070
40	5·6664764	6·8694854	40	5·6571740	6·8595608	40	5·6482068	6·8495684
41	5·6543887	6·8512832	41	5·6450863	6·8413824	41	5·6361191	6·8314161
42	5·6421149	6·8326449	42	5·6328125	6·8227685	42	5·6238453	6·8128271
43	5·6296409	6·8135469	43	5·6203385	6·8036947	43	5·6113713	6·7937789
44	5·6169520	6·7939643	44	5·6076196	6·7841365	44	5·5986824	6·7742459
45	5·6040323	6·7738696	45	5·5947299	6·7640668	45	5·5857627	6·7542016
46	5·5908653	6·7532346	46	5·5815629	6·7434562	46	5·5725957	6·7336171
47	5·5774336	6·7320279	47	5·5681312	6·7222745	47	5·5591640	6·7124608
48	5·5637190	6·7102164	48	5·5544166	6·7004877	48	5·5454494	6·6907002
49	5·5497024	6·6877633	49	5·5404000	6·6780601	49	5·5314328	6·6682987
50	5·5353640	6·6646300	50	5·5260616	6·6549518	50	5·5170944	6·6452172
51	5·5206830	6·6407730	51	5·5113806	6·6311206	51	5·5024134	6·6214124
52	5·5053933	6·6161460	52	5·4960909	6·6065192	52	5·4871237	6·5968381
53	5·4896588	6·5907181	53	5·4803564	6·5811170	53	5·4713892	6·5714631
54	5·4734622	6·5644392	54	5·4641598	6·5548647	54	5·4551926	6·5452381

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of **Female** (y)	9			10			11	
Age of **Male** (x)	$\lambda D_{x,\,9}$	$\lambda N_{x,\,9}$	**Age** of **Male** (x)	$\lambda D_{x,\,10}$	$\lambda N_{x,\,10}$	**Age** of **Male** (x)	$\lambda D_{x,\,11}$	$\lambda N_{x,\,11}$
55	5·4567763	6·5372551	55	5·4474739	6·5277072	55	5·4385067	6·5181088
56	5·4395634	6·5091056	56	5·4302610	6·4995843	56	5·4212938	6·4900142
57	5·4217754	6·4799249	57	5·4124730	6·4704300	57	5·4035058	6·4608884
58	5·4033539	6·4496406	58	5·3940515	6·4401729	58	5·3850843	6·4306596
59	5·3842303	6·4181744	59	5·3749279	6·4087343	59	5·3659607	6·3992501
60	5·3643255	6·3854436	60	5·3550231	6·3760298	60	5·3460559	6·3665756
61	5·3435502	6·3513574	61	5·3342478	6·3419704	61	5·3252806	6·3325448
62	5·3218047	6·3158187	62	5·3125023	6·3064587	62	5·3035351	6·2970624
63	5·2989790	6·2787241	63	5·2896766	6·2693908	63	5·2807094	6·2600244
64	5·2749528	6·2399636	64	5·2656504	6·2306566	64	5·2566832	6·2213198
65	5·2495954	6·1994197	65	5·2402930	6·1901386	65	5·2313258	6·1808310
66	5·2227658	6·1569672	66	5·2134634	6·1477119	66	5·2044962	6·1384335
67	5·1943127	6·1124739	67	5·1850103	6·1032432	67	5·1760431	6·0939940
68	5·1640746	6·0657996	68	5·1547722	6·0565932	68	5·1458050	6·0473723
69	5·1318793	6·0167957	69	5·1225769	6·0076126	69	5·1136097	5·9984197
70	5·0975447	5·9653057	70	5·0882423	5·9561444	70	5·0792751	5·9469791
71	5·0608781	5·9111581	71	5·0515757	5·9020236	71	5·0426085	5·8928845
72	5·0216765	5·8541930	72	5·0123741	5·8450738	72	5·0034069	5·8359618
73	4·9797268	5·7942121	73	4·9704244	5·7851131	73	4·9614572	5·7760259
74	4·9348052	5·7310278	74	4·9255028	5·7219467	74	4·9165356	5·7128843
75	4·8866779	5·6644368	75	4·8773755	5·6553724	75	4·8684083	5·6463332
76	4·8351005	5·5942259	76	4·8257981	5·5851770	76	4·8168309	5·5761602
77	4·7798186	5·5201719	77	4·7705162	5·5111374	77	4·7615490	5·5021420
78	4·7205672	5·4420419	78	4·7112648	5·4330196	78	4·7022976	5·4240446
79	4·6570711	5·3595918	79	4·6477687	5·3505806	79	4·6388015	5·3416239
80	4·5890447	5·2725654	80	4·5797123	5·2635648	80	4·5707751	5·2546256
81	4·5161921	5·1806992	81	4·5068897	5·1717057	81	4·4979225	5·1627839
82	4·4382070	5·0837151	82	4·4289046	5·0747287	82	4·4199374	5·0658205
83	4·3547731	4·9813252	83	4·3454707	4·9723440	83	4·3365035	4·9634502
84	4·2655633	4·8732311	84	4·2562609	4·8642530	84	4·2472937	4·8553714
85	4·1702405	4·7591207	85	4·1609381	4·7501457	85	4·1519709	4·7412738
86	4·0684571	4·6386709	86	4·0591547	4·6296980	86	4·0501875	4·6208364
87	3·9598553	4·5115505	87	3·9505529	4·5025763	87	3·9415857	4·4937236
88	3·8440669	4·3774115	88	3·8347645	4·3684363	88	3·8257973	4·3595902
89	3·7207135	4·2358967	89	3·7114111	4·2269189	89	3·7024439	4·2180789
90	3·5894060	4·0866357	90	3·5801036	4·0776545	90	3·5711364	4·0688194
91	3·4497455	3·9292447	91	3·4404431	3·9202600	91	3·4314759	3·9114288
92	3·3013224	3·7633291	92	3·2920200	3·7543376	92	3·2830528	3·7455104
93	3·1437169	3·5884745	93	3·1344145	3·5794783	93	3·1254473	3·5706515
94	2·9764988	3·4042532	94	2·9671964	3·3952502	94	2·9582292	3·3864253
95	2·7992277	3·2102104	95	2·7899253	3·2012010	95	2·7809581	3·1923765
96	2·6114528	3·0058615	96	2·6021504	2·9968443	96	2·5931832	2·9880205
97	2·4127129	2·7906672	97	2·4034105	2·7816427	97	2·3944433	2·7728181
98	2·2025366	2·5639981	98	2·1932342	2·5549650	98	2·1842670	2·5461403
99	1·9804422	2·3250512	99	1·9711398	2·3160089	99	1·9621726	2·3071831
100	1·7459374	2·0726774	100	1·7366350	2·0636234	100	1·7276678	2·0547957
101	1·4985199	1·8049894	101	1·4892175	1·7959203	101	1·4802503	1·7870876
102	1·2376769	1·5184218	102	1·2283745	1·5093316	102	1·2194073	1·5004904
103	0·9628853	1·2052450	103	0·9535829	1·1961126	103	0·9446157	1·1872555
104	0·6736117	0·8455507	104	0·6643093	0·8363621	104	0·6553421	0·8274597
105	0·3693123		105	0·3600099		105	0·3510427	
106	0·0494331		106	0·0401307		106	0·0311635	
107	9·7134097		107	9·7041073		107	9·6951401	
108	9·3606674		108	9·3513650		108	9·3423978	
109	8·9906211		109	8·9813187		109	8·9723515	

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	12		13			14		
Age of Male (x)	$\lambda\ D_{x,\,12}$	$\lambda\ N_{x,\,12}$	Age of Male (x)	$\lambda\ D_{x,\,13}$	$\lambda\ N_{x,\,13}$	Age of Male (x)	$\lambda\ D_{x,\,14}$	$\lambda\ N_{x,\,14}$
0	6·1705685	7·3692427	0	6·1619263	7·3579175	0	6·1532984	7·3464338
1	6·0865663	7·3521945	1	6·0779241	7·3408485	1	6·0692962	7·3293416
2	6·0512854	7·3393123	2	6·0426432	7·3279724	2	6·0340153	7·3164709
3	6·0291721	7·3276650	3	6·0205299	7·3163407	3	6·0119020	7·3048538
4	6·0122704	7·3165589	4	6·0036282	7·3052549	4	5·9950003	7·2937878
5	5·9980430	7·3057341	5	5·9894008	7·2944532	5	5·9807729	7·2830099
6	5·9856818	7·2950608	6	5·9770396	7·2838056	6	5·9684117	7·2723875
7	5·9745383	7·2844470	7	5·9658961	7·2732194	7	5·9572682	7·2618289
8	5·9641241	7·2738313	8	5·9554819	7·2626328	8	5·9468540	7·2512717
9	5·9543767	7·2631749	9	5·9457345	7·2520069	9	5·9371066	7·2406763
10	5·9451415	7·2524402	10	5·9364993	7·2413034	10	5·9278714	7·2300047
11	5·9362770	7·2415958	11	5·9276348	7·2304913	11	5·9190069	7·2192247
12	5·9276550	7·2306158	12	5·9190128	7·2195439	12	5·9103849	7·2083108
13	5·9191605	7·2194795	13	5·9105183	7·2084406	13	5·9018904	7·1972414
14	5·9106916	7·2081706	14	5·9020494	7·1971655	14	5·8934215	7·1860000
15	5·9021598	7·1966785	15	5·8935176	7·1857067	15	5·8848897	7·1745756
16	5·8934895	7·1849948	16	5·8848473	7·1740566	16	5·8762194	7·1629600
17	5·8846187	7·1731160	17	5·8759765	7·1622112	17	5·8673486	7·1511492
18	5·8754982	7·1610408	18	5·8668560	7·1501698	18	5·8582281	7·1391421
19	5·8660924	7·1487717	19	5·8574502	7·1379340	19	5·8488223	7·1269408
20	5·8563786	7·1363121	20	5·8477364	7·1255076	20	5·8391085	7·1145486
21	5·8463474	7·1236678	21	5·8377052	7·1128965	21	5·8290773	7·1019718
22	5·8362358	7·1108455	22	5·8275936	7·1001068	22	5·8189657	7·0892165
23	5·8260465	7·0978388	23	5·8174043	7·0871331	23	5·8087764	7·0762767
24	5·8157813	7·0846403	24	5·8071391	7·0739676	24	5·7985112	7·0631449
25	5·8054412	7·0712441	25	5·7967990	7·0606031	25	5·7881711	7·0498140
26	5·7950263	7·0576406	26	5·7863841	7·0470319	26	5·7777562	7·0362759
27	5·7845359	7·0438227	27	5·7758937	7·0332452	27	5·7672658	7·0225225
28	5·7739684	7·0297803	28	5·7653262	7·0192345	28	5·7566983	7·0085436
29	5·7633216	7·0155036	29	5·7546794	7·0049883	29	5·7460515	6·9943302
30	5·7525922	7·0009830	30	5·7439500	6·9904977	30	5·7353221	6·9798710
31	5·7417762	6·9862063	31	5·7331340	6·9757509	31	5·7245061	6·9651553
32	5·7308687	6·9711619	32	5·7222265	6·9607363	32	5·7135986	6·9501714
33	5·7198640	6·9558375	33	5·7112218	6·9454409	33	5·7025939	6·9349063
34	5·7087556	6·9402195	34	5·7001134	6·9298516	34	5·6914855	6·9193466
35	5·6975361	6·9242938	35	5·6888939	6·9139538	35	5·6802660	6·9034782
36	5·6861973	6·9080448	36	5·6775551	6·8977330	36	5·6689272	6·8872860
37	5·6747301	6·8914567	37	5·6660879	6·8811726	37	5·6574600	6·8707540
38	5·6631247	6·8745126	38	5·6544825	6·8642556	38	5·6458546	6·8538650
39	5·6513703	6·8571941	39	5·6427281	6·8469642	39	5·6341002	6·8366011
40	5·6394555	6·8394818	40	5·6308133	6·8292788	40	5·6221854	6·8189431
41	5·6273678	6·8213553	41	5·6187256	6·8111788	41	5·6100977	6·8008704
42	5·6150940	6·8027928	42	5·6064518	6·7926425	42	5·5978239	6·7823610
43	5·6026200	6·7837701	43	5·5939778	6·7736470	43	5·5853499	6·7633918
44	5·5899311	6·7642633	44	5·5812889	6·7541661	44	5·5726610	6·7439382
45	5·5770114	6·7442450	45	5·5683692	6·7341741	45	5·5597413	6·7239724
46	5·5638444	6·7236866	46	5·5552022	6·7136421	46	5·5465743	6·7034667
47	5·5504127	6·7025572	47	5·5417705	6·6925391	47	5·5331426	6·6823902
48	5·5366981	6·6808226	48	5·5280559	6·6708317	48	5·5194280	6·6607094
49	5·5226815	6·6584480	49	5·5140393	6·6484835	49	5·5054114	6·6383881
50	5·5083431	6·6353933	50	5·4997009	6·6254559	50	5·4910730	6·6153869
51	5·4936621	6·6116160	51	5·4850199	6·6017058	51	5·4763920	6·5916637
52	5·4783724	6·5870689	52	5·4697302	6·5771866	52	5·4611023	6·5671715
53	5·4626379	6·5617218	53	5·4539957	6·5518668	53	5·4453678	6·5418794
54	5·4464413	6·5355249	54	5·4377991	6·5256981	54	5·4291712	6·5157381

JOINT LIVES :—Male and Female Life.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	12		13			14		
Age of Male (x)	λ $D_{x,\,12}$	λ $N_{x,\,12}$	Age of Male (x)	λ $D_{x,\,13}$	λ $N_{x,\,13}$	Age of Male (x)	λ $D_{x,\,14}$	λ $N_{x,\,14}$
55	5·4297554	6·5084238	55	5·4211132	6·4986255	55	5·4124853	6·4886934
56	5·4125425	6·4803586	56	5·4039003	6·4705887	56	5·3952724	6·4606849
57	5·3947545	6·4512619	57	5·3861123	6·4415218	57	5·3774844	6·4316463
58	5·3763330	6·4210627	58	5·3676908	6·4113522	58	5·3590629	6·4015063
59	5·3572094	6·3896830	59	5·3485672	6·3800023	59	5·3399393	6·3701857
60	5·3373046	6·3570387	60	5·3286624	6·3473885	60	5·3200345	6·3376012
61	5·3165293	6·3230394	61	5·3078871	6·3134195	61	5·2992592	6·3036625
62	5·2947838	6·2875873	62	5·2861416	6·2779991	62	5·2775137	6·2682723
63	5·2719581	6·2505798	63	5·2633159	6·2410227	63	5·2546880	6·2313273
64	5·2479319	6·2119064	64	5·2392897	6·2023807	64	5·2306618	6·1927160
65	5·2225745	6·1714492	65	5·2139323	6·1619552	65	5·2053044	6·1523217
66	5·1957449	6·1290824	66	5·1871027	6·1196210	66	5·1784748	6·1100190
67	5·1672918	6·0846746	67	5·1586496	6·0752447	67	5·1500217	6·0656750
68	5·1370537	6·0370843	68	5·1284115	6·0286868	68	5·1197836	6·0191483
69	5·1048584	5·9891623	69	5·0962162	5·9797973	69	5·0875883	5·9702911
70	5·0705238	5·9377525	70	5·0618816	5·9284189	70	5·0532537	5·9189457
71	5·0338572	5·8836881	71	5·0252150	5·8743867	71	5·0165871	5·8649446
72	4·9946556	5·8267949	72	4·9860134	5·8175253	72	4·9773855	5·8081152
73	4·9527059	5·7668885	73	4·9440637	5·7576501	73	4·9354358	5·7482723
74	4·9077843	5·7037755	74	4·8991421	5·6945683	74	4·8905142	5·6852218
75	4·8596570	5·6372528	75	4·8510148	5·6280759	75	4·8423869	5·6187610
76	4·8080796	5·5671068	76	4·7994374	5·5579604	76	4·7908095	5·5486763
77	4·7527977	5·4931147	77	4·7441555	5·4839975	77	4·7355276	5·4747447
78	4·6935463	5·4150431	78	4·6849041	5·4059542	78	4·6762762	5·3967317
79	4·6300502	5·3326469	79	4·6214080	5·3235866	79	4·6127801	5·3143934
80	4·5620238	5·2456716	80	4·5533816	5·2366388	80	4·5447537	5·2274750
81	4·4891712	5·1538520	81	4·4805290	5·1448450	81	4·4719011	5·1357101
82	4·4111861	5·0569110	82	4·4025439	5·0479295	82	4·3939160	5·0388216
83	4·3277522	4·9545590	83	4·3191100	4·9456030	83	4·3104821	4·9365228
84	4·2385424	4·8464998	84	4·2299002	4·8375657	84	4·2212723	4·8285123
85	4·1432196	4·7324203	85	4·1345774	4·7235090	85	4·1259495	4·7144798
86	4·0414362	4·6119982	86	4·0327940	4·6031086	86	4·0241661	4·5941040
87	3·9328344	4·4849010	87	3·9241922	4·4760316	87	3·9155643	4·4670509
88	3·8170460	4·3507821	88	3·8084038	4·3419317	88	3·7997759	4·3329734
89	3·6936926	4·2092830	89	3·6850504	4·2004513	89	3·6764225	4·1915147
90	3·5623851	4·0600354	90	3·5537429	4·0512198	90	3·5451150	4·0423046
91	3·4227246	3·9026550	91	3·4140824	3·8938555	91	3·4054545	3·8849595
92	3·2743015	3·7367462	92	3·2656593	3·7279615	92	3·2570314	3·7190843
93	3·1166960	3·5618976	93	3·1080538	3·5531266	93	3·0994259	3·5442665
94	2·9494779	3·3776779	94	2·9408357	3·3689205	94	2·9322078	3·3600782
95	2·7722068	3·1836362	95	2·7635646	3·1748913	95	2·7549367	3·1660653
96	2·5844319	2·9792866	96	2·5757897	2·9705533	96	2·5671618	2·9617432
97	2·3856920	2·7640909	97	2·3770498	2·7553687	97	2·3684219	2·7465742
98	2·1755157	2·5374186	98	2·1668735	2·5287085	98	2·1582456	2·5199290
99	1·9534213	2·2984675	99	1·9447791	2·2897695	99	1·9361512	2·2810070
100	1·7189165	2·0460865	100	1·7102743	2·0374003	100	1·7016464	2·0286563
101	1·4714990	1·7783835	101	1·4628568	1·7697118	101	1·4542289	1·7609869
102	1·2106560	1·4917888	102	1·2020138	1·4831307	102	1·1933859	1·4744290
103	0·9358644	1·1785539	103	0·9272222	1·1699065	103	0·9185943	1·1612302
104	0·6465908	0·8187470	104	0·6379486	0·8101115	104	0·6293207	0·8014586
105	0·3422914		105	0·3336492		105	0·3250213	
106	0·0224122		106	0·0137700		106	0·0051421	
107	9·6863888		107	9·6777466		107	9·6691187	
108	9·3336465		108	9·3250043		108	9·3163764	
109	8·9636002		109	8·9549580		109	8·9463301	

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of **Female** (y)	15			16			17	
Age of **Male** (x)	$\lambda\ D_{x,\,15}$	$\lambda\ N_{x,\,15}$	**Age** of **Male** (x)	$\lambda\ D_{x,\,16}$	$\lambda\ N_{x,\,16}$	**Age** of **Male** (x)	$\lambda\ D_{x,\,17}$	$\lambda\ N_{x,\,17}$
0	6·1446022	7·3347795	0	6·1357674	7·3229481	0	6·1267360	7·3109326
1	6·0606000	7·3176626	1	6·0517652	7·3058052	1	6·0427338	7·2937662
2	6·0253191	7·3047970	2	6·0164843	7·2929442	2	6·0074529	7·2809090
3	6·0032058	7·2931945	3	5·9943710	7·2813561	3	5·9853396	7·2693352
4	5·9863041	7·2821481	4	5·9774693	7·2703292	4	5·9684379	7·2583278
5	5·9720767	7·2713929	5	5·9632419	7·2595970	5	5·9542105	7·2476184
6	5·9597155	7·2607967	6	5·9508807	7·2490264	6	5·9418493	7·2370733
7	5·9485720	7·2502658	7	5·9397372	7·2385231	7	5·9307058	7·2265976
8	5·9381578	7·2397376	8	5·9293230	7·2280242	8	5·9202916	7·2161282
9	5·9284104	7·2291728	9	5·9195756	7·2174900	9	5·9105442	7·2056250
10	5·9191752	7·2185332	10	5·9103404	7·2068822	10	5·9013090	7·1950490
11	5·9103107	7·2077862	11	5·9014759	7·1961685	11	5·8924445	7·1843686
12	5·9016887	7·1969056	12	5·8928539	7·1853221	12	5·8838225	7·1735560
13	5·8931942	7·1858705	13	5·8843594	7·1743209	13	5·8753280	7·1625901
14	5·8847253	7·1746638	14	5·8758905	7·1631497	14	5·8668591	7·1514541
15	5·8761935	7·1632744	15	5·8673587	7·1517959	15	5·8583273	7·1401364
16	5·8675232	7·1516941	16	5·8586884	7·1402513	16	5·8496570	7·1286283
17	5·8586524	7·1399185	17	5·8498176	7·1285117	17	5·8407862	7·1169258
18	5·8495319	7·1279466	18	5·8406971	7·1165762	18	5·8316657	7·1050273
19	5·8401261	7·1157805	19	5·8312913	7·1044469	19	5·8222599	7·0929350
20	5·8304123	7·1034243	20	5·8215775	7·0921267	20	5·8125461	7·0806525
21	5·8203811	7·0908828	21	5·8115463	7·0796218	21	5·8025149	7·0681853
22	5·8102695	7·0781627	22	5·8014347	7·0669388	22	5·7924033	7·0555401
23	5·8000802	7·0652582	23	5·7912454	7·0540705	23	5·7822140	7·0427094
24	5·7898150	7·0521617	24	5·7809802	7·0410104	24	5·7719488	7·0296870
25	5·7794749	7·0388657	25	5·7706401	7·0277507	25	5·7616087	7·0164651
26	5·7690600	7·0253624	26	5·7602252	7·0142832	26	5·7511938	7·0030347
27	5·7585696	7·0116427	27	5·7497348	7·0005992	27	5·7407034	6·9893882
28	5·7480021	6·9976979	28	5·7391673	6·9866893	28	5·7301359	6·9755151
29	5·7373553	6·9835176	29	5·7285205	6·9725440	29	5·7194891	6·9614056
30	5·7266259	6·9690916	30	5·7177911	6·9581520	30	5·7087597	6·9470495
31	5·7158099	6·9544083	31	5·7069751	6·9435027	31	5·6979437	6·9324352
32	5·7049024	6·9394561	32	5·6960676	6·9285838	32	5·6870362	6·9175510
33	5·6938977	6·9242223	33	5·6850629	6·9133823	33	5·6760315	6·9023837
34	5·6827893	6·9086936	34	5·6739545	6·8978856	34	5·6649231	6·8869200
35	5·6715698	6·8928553	35	5·6627350	6·8820789	35	5·6537036	6·8711459
36	5·6602310	6·8766928	36	5·6513962	6·8659472	36	5·6423648	6·8550464
37	5·6487638	6·8601900	37	5·6399290	6·8494747	37	5·6308976	6·8386050
38	5·6371584	6·8433301	38	5·6283236	6·8326440	38	5·6192922	6·8218053
39	5·6254040	6·8260945	39	5·6165692	6·8154378	39	5·6075378	6·8046286
40	5·6134892	6·8084643	40	5·6046544	6·7978362	40	5·5956230	6·7870568
41	5·6014015	6·7904192	41	5·5925667	6·7798191	41	5·5835353	6·7690683
42	5·5891277	6·7719371	42	5·5802929	6·7613647	42	5·5712615	6·7506421
43	5·5766537	6·7529949	43	5·5678189	6·7424498	43	5·5587875	6·7317550
44	5·5639648	6·7335676	44	5·5551300	6·7230495	44	5·5460986	6·7123821
45	5·5510451	6·7136291	45	5·5422103	6·7031372	45	5·5331789	6·6924967
46	5·5378781	6·6931493	46	5·5290433	6·6826848	46	5·5200119	6·6720702
47	5·5244464	6·6720992	47	5·5156116	6·6616602	47	5·5065802	6·6510727
48	5·5107318	6·6504446	48	5·5018970	6·6400315	48	5·4928656	6·6294694
49	5·4967152	6·6281496	49	5·4878804	6·6177626	49	5·4788490	6·6072258
50	5·4823768	6·6051750	50	5·4735420	6·5948138	50	5·4645106	6·5843026
51	5·4676958	6·5814780	51	5·4588610	6·5711428	51	5·4498296	6·5606568
52	5·4524061	6·5570122	52	5·4435713	6·5467024	52	5·4345399	6·5362419
53	5·4366716	6·5317467	53	5·4278368	6·5214628	53	5·4188054	6·5110271
54	5·4204750	6·5056326	54	5·4116402	6·4953746	54	5·4026088	6·4849639

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Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of Female (y)	15		16			17		
Age of Male (x)	λ $D_{x,15}$	λ $N_{x,15}$	Age of Male (x)	λ $D_{x,16}$	λ $N_{x,16}$	Age of Male (x)	λ $D_{x,17}$	λ $N_{x,17}$
55	5·4037891	6·4786148	55	5·3949543	6·4683832	55	5·3859229	6·4579977
56	5·3865762	6·4506336	56	5·3777414	6·4404281	56	5·3687100	6·4300680
57	5·3687882	6·4216227	57	5·3599534	6·4114436	57	5·3509220	6·4011085
58	5·3503667	6·3915101	58	5·3415319	6·3813577	58	5·3325005	6·3710480
59	5·3312431	6·3602186	59	5·3224083	6·3500926	59	5·3133769	6·3398081
60	5·3113383	6·3276623	60	5·3025035	6·3175644	60	5·2934721	6·3073050
61	5·2905630	6·2937525	61	5·2817282	6·2836813	61	5·2726968	6·2734486
62	5·2688175	6·2583916	62	5·2599827	6·2483481	62	5·2509513	6·2381403
63	5·2459918	6·2214758	63	5·2371570	6·2114601	63	5·2281256	6·2012783
64	5·2219656	6·1828949	64	5·2131308	6·1729070	64	5·2040994	6·1627514
65	5·1966082	6·1425303	65	5·1877734	6·1325708	65	5·1787420	6·1224413
66	5·1697786	6·1002575	66	5·1609438	6·0903265	66	5·1519124	6·0802230
67	5·1413255	6·0559438	67	5·1324907	6·0460411	67	5·1234593	6·0359642
68	5·1110874	6·0094484	68	5·1022526	5·9995742	68	5·0932212	5·9895233
69	5·0788921	5·9606216	69	5·0700573	5·9507765	69	5·0610259	5·9407520
70	5·0445575	5·9093067	70	5·0357227	5·8994906	70	5·0266913	5·8894928
71	5·0078909	5·8553380	71	4·9990561	5·8455503	71	4·9900247	5·8355788
72	4·9686893	5·7985390	72	4·9598545	5·7887809	72	4·9508231	5·7788357
73	4·9267396	5·7387269	73	4·9179048	5·7289979	73	4·9088734	5·7190794
74	4·8818180	5·6757075	74	4·8729832	5·6660076	74	4·8639518	5·6561155
75	4·8336907	5·6092774	75	4·8248559	5·5996067	75	4·8158245	5·5897408
76	4·7821133	5·5392234	76	4·7732785	5·5295814	76	4·7642471	5·5197422
77	4·7268314	5·4653221	77	4·7179966	5·4557088	77	4·7089652	5·4458954
78	4·6675800	5·3873395	78	4·6587452	5·3777547	78	4·6497138	5·3679675
79	4·6040839	5·3050310	79	4·5952491	5·2954749	79	4·5862177	5·2857135
80	4·5360575	5·2181418	80	4·5272227	5·2086138	80	4·5181913	5·1988783
81	4·4632049	5·1264062	81	4·4543701	5·1169059	81	4·4453387	5·1071957
82	4·3852198	5·0295461	82	4·3763850	5·0200740	82	4·3673536	5·0103886
83	4·3017859	4·9272744	83	4·2929511	4·9178289	83	4·2839197	4·9081697
84	4·2125761	4·8192918	84	4·2037413	4·8098727	84	4·1947099	4·8002372
85	4·1172533	4·7052863	85	4·1084185	4·6958939	85	4·0993871	4·6862823
86	4·0154699	4·5849359	86	4·0066351	4·5755688	86	3·9976037	4·5659823
87	3·9068681	4·4579081	87	3·8980333	4·4485662	87	3·8890019	4·4390025
88	3·7910797	4·3238551	88	3·7822449	4·3145377	88	3·7732135	4·3049974
89	3·6677263	4·1824199	89	3·6588915	4·1731266	89	3·6498601	4·1636089
90	3·5364188	4·0332323	90	3·5275840	4·0239620	90	3·5185526	4·0144668
91	3·3967583	3·8759099	91	3·3879235	3·8666624	91	3·3788921	3·8571883
92	3·2483352	3·7100556	92	3·2395004	3·7008300	92	3·2304690	3·6913777
93	3·0907297	3·5352586	93	3·0818949	3·5260535	93	3·0728635	3·5166226
94	2·9235116	3·3510895	94	2·9146768	3·3419056	94	2·9056454	3·3324938
95	2·7462405	3·1570951	95	2·7374057	3·1479319	95	2·7283743	3·1385398
96	2·5584656	2·9527914	96	2·5496308	2·9436478	96	2·5405994	2·9342757
97	2·3597257	2·7376410	97	2·3508909	2·7285161	97	2·3418595	2·7191638
98	2·1495494	2·5110139	98	2·1407146	2·5019105	98	2·1316832	2·4925760
99	1·9274550	2·2721114	99	1·9186202	2·2630274	99	1·9095888	2·2537147
100	1·6929502	2·0197828	100	1·6841154	2·0107228	100	1·6750840	2·0014330
101	1·4455327	1·7521392	101	1·4366979	1·7431082	101	1·4276665	1·7338470
102	1·1846897	1·4656104	102	1·1758549	1·4566150	102	1·1668235	1·4473922
103	0·9098981	1·1524473	103	0·9010633	1·1434957	103	0·8920319	1·1343237
104	0·6206245	0·7927208	104	0·6117897	0·7838179	104	0·6027583	0·7747067
105	0·3163251		105	0·3074903		105	0·2984589	
106	9·9964459		106	9·9876111		106	9·9785797	
107	9·6604225		107	9·6515877		107	9·6425563	
108	9·3076802		108	9·2988454		108	9·2898140	
109	8·9376339		109	8·9287991		109	8·9197677	

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	18		19			20		
Age of Male (x)	$\lambda\ D_{x,\,18}$	$\lambda\ N_{x,\,18}$	Age of Male (x)	$\lambda\ D_{x,\,19}$	$\lambda\ N_{x,\,19}$	Age of Male (x)	$\lambda\ D_{x,\,20}$	$\lambda\ N_{x,\,20}$
0	6·1174622	7·2987347	0	6·1079123	7·2863552	0	6·0980649	7·2737980
1	6·0334600	7·2815426	1	6·0239101	7·2691392	1	6·0140627	7·2565595
2	5·9981791	7·2686919	2	5·9886292	7·2562924	2	5·9787818	7·2437175
3	5·9760658	7·2571317	3	5·9665159	7·2447482	3	5·9566685	7·2321867
4	5·9591641	7·2461437	4	5·9496142	7·2337786	4	5·9397668	7·2212381
5	5·9449367	7·2354570	5	5·9353868	7·2231150	5	5·9255394	7·2105961
6	5·9325755	7·2249371	6	5·9230256	7·2126203	6	5·9131782	7·2001271
7	5·9214320	7·2144892	7	5·9118821	7·2021997	7	5·9020347	7·1897337
8	5 9110178	7·2040489	8	5·9014679	7·1917890	8	5·8916205	7·1793521
9	5·9012704	7·1935768	9	5·8917205	7·1813476	9	5·8818731	7·1689416
10	5·8920352	7·1830332	10	5·8824853	7·1708362	10	5·8726379	7·1584626
11	5·8831707	7·1723858	11	5·8736208	7·1602224	11	5·8637734	7·1478821
12	5·8745487	7·1616075	12	5·8649988	7·1494784	12	5·8551514	7·1371729
13	5·8660542	7·1506767	13	5·8565043	7·1385831	13	5·8466569	7·1263133
14	5·8575853	7·1395769	14	5·8480354	7·1275194	14	5·8381880	7·1152860
15	5·8490535	7·1282955	15	5·8395036	7·1162750	15	5·8296562	7·1040789
16	5·8403832	7·1168245	16	5·8308333	7·1048413	16	5·8209859	7·0926835
17	5·8315124	7·1051595	17	5·8219625	7·0932147	17	5·8121151	7·0810952
18	5·8223919	7·0932988	18	5·8128420	7·0813927	18	5·8029946	7·0693128
19	5·8129861	7·0812447	19	5·8034362	7·0693777	19	5·7935888	7·0573378
20	5·8032723	7·0690007	20	5·7937224	7·0571729	20	5·7838750	7·0451734
21	5·7932411	7·0565722	21	5·7836912	7·0447843	21	5·7738438	7·0328257
22	5·7831295	7·0439656	22	5·7735796	7·0322177	22	5·7637322	7·0203009
23	5·7729402	7·0311745	23	5·7633903	7·0194670	23	5·7535429	7·0075916
24	5·7626750	7·0181915	24	5·7531251	7·0065243	24	5·7432777	6·9946908
25	5·7523349	7·0050079	25	5·7427850	6·9933820	25	5·7329376	6·9815904
26	5·7419200	6·9916169	26	5·7323701	6·9800310	26	5·7225227	6·9682818
27	5·7314296	6·9780085	27	5·7218797	6·9664631	27	5·7120323	6·9547554
28	5·7208621	6·9641739	28	5·7113122	6·9526681	28	5·7014648	6·9410024
29	5·7102153	6·9501025	29	5·7006654	6·9386364	29	5·6908180	6·9270119
30	5·6994859	6·9357834	30	5·6899360	6·9243566	30	5·6800886	6·9127732
31	5·6886699	6·9212060	31	5·6791200	6·9098173	31	5·6692726	6·8982746
32	5·6777624	6·9063577	32	5·6682125	6·8950072	32	5·6583651	6·8835039
33	5·6667577	6·8912261	33	5·6572078	6·8799127	33	5·6473604	6·8684489
34	5·6556493	6·8757974	34	5·6460994	6·8645206	34	5·6362520	6·8530951
35	5·6444298	6·8600573	35	5·6348799	6·8488165	35	5·6250325	6·8374288
36	5·6330910	6·8439911	36	5·6235411	6·8327851	36	5·6136937	6·8214344
37	5·6216238	6·8275826	37	5·6120739	6·8164107	37	5·6022265	6·8050957
38	5·6100184	6·8108144	38	5·6004685	6·7996761	38	5·5906211	6·7883964
39	5·5982640	6·7936691	39	5·5887141	6·7825631	39	5·5788667	6·7713179
40	5·5863492	6·7761273	40	5·5767993	6·7650531	40	5·5669519	6·7538409
41	5·5742615	6·7581690	41	5·5647116	6·7471255	41	5·5548642	6·7359457
42	5·5619877	6·7397718	42	5·5524378	6·7287587	42	5·5425904	6·7176103
43	5·5495137	6·7209129	43	5·5399638	6·7099292	43	5·5301164	6·6988118
44	5·5368248	6·7015678	44	5·5272749	6·6906126	44	5·5174275	6·6795250
45	5·5239051	6·6817098	45	5·5143552	6·6707825	45	5·5045078	6·6597240
46	5·5107381	6·6613103	46	5·5011882	6·6504105	46	5·4913408	6·6393801
47	5·4973064	6·6403384	47	5·4877565	6·6294656	47	5·4779091	6·6184628
48	5·4835918	6·6187618	48	5·4740419	6·6079147	48	5·4641945	6·5969391
49	5·4695752	6·5965433	49	5·4600253	6·5857227	49	5·4501779	6·5747727
50	5·4552368	6·5736451	50	5·4456869	6·5628492	50	5·4358395	6·5519259
51	5·4405558	6·5500244	51	5·4310059	6·5392531	51	5·4211585	6·5283544
52	5·4252661	6·5256340	52	5·4157162	6·5148872	52	5·4058688	6·5040129
53	5·4095316	6·5004440	53	5·3999817	6·4897212	53	5·3901343	6·4788711
54	5·3933350	6·4744048	54	5·3837851	6·4637064	54	5·3739377	6·4528798

JOINT LIVES:—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of **Female** (y)	18		19			20		
Age of **Male** (x)	λ $D_{x,\,18}$	λ $N_{x,\,18}$	**Age** of **Male** (x)	λ $D_{x,\,19}$	λ $N_{x,\,19}$	**Age** of **Male** (x)	λ $D_{x,\,20}$	λ $N_{x,\,20}$
55	5·3766491	6·4474627	55	5·3670992	6·4367876	55	5·3572518	6·4259850
56	5·3594362	6·4195573	56	5·3498863	6·4089054	56	5·3400389	6·3981257
57	5·3416482	6·3906221	57	5·3320983	6·3799937	57	5·3222509	6·3692365
58	5·3232267	6·3605855	58	5·3136768	6·3499804	58	5·3038294	6·3392458
59	5·3041031	6·3293696	59	5·2945532	6·3187873	59	5·2847058	6·3080754
60	5·2841983	6·2968904	60	5·2746484	6·2863309	60	5·2648010	6·2756409
61	5·2634230	6·2630576	61	5·2538731	6·2525205	61	5·2440257	6·2418524
62	5·2416775	6·2277744	62	5·2321276	6·2172593	62	5·2222802	6·2066124
63	5·2188518	6·1909357	63	5·2093019	6·1804442	63	5·1994545	6·1698180
64	5·1948256	6·1524327	64	5·1852757	6·1419628	64	5·1754283	6·1313585
65	5·1694682	6·1121470	65	5·1599183	6·1016990	65	5·1500709	6·0911149
66	5·1426386	6·0699528	66	5·1330887	6·0595271	66	5·1232413	6·0489633
67	5·1141855	6·0257175	67	5·1046356	6·0153136	67	5·0947882	6·0047706
68	5·0839474	5·9793007	68	5·0743975	5·9689179	68	5·0645501	5·9583952
69	5·0517521	5·9305527	69	5·0422022	5·9201922	69	5·0323548	5·9096881
70	5·0174175	5·8793173	70	5·0078676	5·8689775	70	4·9980202	5·8584932
71	4·9807509	5·8254273	71	4·9712010	5·8151089	71	4·9613536	5·8046433
72	4·9415493	5·7687081	72	4·9319994	5·7584102	72	4·9221520	5·7479634
73	4·8995996	5·7089749	73	4·8900497	5·6986980	73	4·8802023	5·6882692
74	4·8546780	5·6460345	74	4·8451281	5·6357778	74	4·8352807	5·6253673
75	4·8065507	5·5796832	75	4·7970008	5·5694468	75	4·7871534	5·5590537
76	4·7549733	5·5097076	76	4·7454234	5·4994912	76	4·7355760	5·4891155
77	4·6996914	5·4358844	77	4·6901415	5·4256874	77	4·6802941	5·4153286
78	4·6404400	5·3579786	78	4·6308901	5·3478021	78	4·6210427	5·3374597
79	4·5769439	5·2757475	79	4·5673940	5·2655895	79	4·5575466	5·2552641
80	4·5089175	5·1889347	80	4·4993676	5·1787960	80	4·4895202	5·1684855
81	4·4360649	5·0972747	81	4·4265150	5·0871544	81	4·4166676	5·0768599
82	4·3580798	5·0004897	82	4·3485299	4·9903881	82	4·3386825	4·9801089
83	4·2746459	4·8982918	83	4·2650960	4·8882087	83	4·2552486	4·8779441
84	4·1854361	4·7903823	84	4·1758862	4·7803166	84	4·1660388	4·7700667
85	4·0901133	4·6764485	85	4·0805634	4·6664010	85	4·0707160	4·6561653
86	3·9883299	4·5561690	86	3·9787800	4·5461389	86	3·9689326	4·5359167
87	3·8797281	4·4292100	87	3·8701782	4·4191967	87	3·8603308	4·4089884
88	3·7639397	4·2952250	88	3·7543898	4·2852286	88	3·7445424	4·2750332
89	3·6405863	4·1538566	89	3·6310364	4·1438766	89	3·6211890	4·1336940
90	3·5092788	4·0047345	90	3·4997289	3·9947705	90	3·4898815	3·9846002
91	3·3696183	3·8474758	91	3·3600684	3·8375278	91	3·3502210	3·8273699
92	3·2211952	3·6816835	92	3·2116453	3·6717521	92	3·2017979	3·6616054
93	3·0635897	3·5069473	93	3·0540398	3·4970306	93	3·0441924	3·4868964
94	2·8963716	3·3228369	94	2·8868217	3·3129357	94	2·8769743	3·3028126
95	2·7191005	3·1289009	95	2·7095506	3·1190146	95	2·6997032	3·1089027
96	2·5313256	2·9246545	96	2·5217757	2·9147825	96	2·5119283	2·9046820
97	2·3325857	2·7095608	97	2·3230358	2·6997042	97	2·3131884	2·6896134
98	2·1224094	2·4829922	98	2·1128595	2·4731511	98	2·1030121	2·4630729
99	1·9003150	2·2441489	99	1·8907651	2·2343237	99	1·8809177	2·2242575
100	1·6658102	1·9918877	100	1·6562603	1·9820799	100	1·6464129	1·9720264
101	1·4183927	1·7243266	101	1·4088428	1·7145393	101	1·3989954	1·7045006
102	1·1575497	1·4379074	102	1·1479998	1·4281461	102	1·1381524	1·4181255
103	0·8827581	1·1248888	103	0·8732082	1·1151710	103	0·8633608	1·1051762
104	0·5934845	0·7653481	104	0·5839346	0·7556996	104	0·5740872	0·7457538
105	0·2891851		105	0·2796352		105	0·2697878	
106	9·9693059		106	9·9597560		106	9·9499086	
107	9·6332825		107	9·6237326		107	9·6138852	
108	9·2805402		108	9·2709903		108	9·2611429	
109	8·9104939		109	8·9009440		109	8·8910966	

JOINT LIVES :—Male and Female Life.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	21			22			23	
Age of Male (x)	λ $D_{x,\,21}$	λ $N_{x,\,21}$	Age of Male (x)	λ $D_{x,\,22}$	λ $N_{x,\,22}$	Age of Male (x)	λ $D_{x,\,23}$	λ $N_{x,\,23}$
0	6·0879109	7·2610706	0	6·0776593	7·2481823	0	6·0673137	7·2351296
1	6·0039087	7·2438092	1	5·9936571	7·2308971	1	5·9833115	7·2178186
2	5·9686278	7·2309727	2	5·9583762	7·2180642	2	5·9480306	7·2049891
3	5·9465145	7·2194559	3	5·9362629	7·2065614	3	5·9259173	7·1934992
4	5·9296128	7·2085252	4	5·9193612	7·1956495	4	5·9090156	7·1826055
5	5·9153854	7·1979078	5	5·9051338	7·1850529	5	5·8947882	7·1720311
6	5·9030242	7·1874626	6	5·8927726	7·1746351	6	5·8824270	7·1616366
7	5·8918807	7·1770967	7	5·8816291	7·1642952	7	5·8712835	7·1513261
8	5·8814665	7·1667441	8	5·8712149	7·1539718	8	5·8608693	7·1410307
9	5·8717191	7·1563644	9	5·8614675	7·1436227	9	5·8511219	7·1307119
10	5·8624839	7·1459176	10	5·8522323	7·1332083	10	5·8418867	7·1203297
11	5·8536194	7·1353709	11	5·8433678	7·1226952	11	5·8330222	7·1098504
12	5·8449974	7·1246965	12	5·8347458	7·1120558	12	5·8244002	7·0992459
13	5·8365029	7·1138728	13	5·8262513	7·1012682	13	5·8159057	7·0884945
14	5·8280340	7·1028821	14	5·8177824	7·0903149	14	5·8074368	7·0775783
15	5·8195022	7·0917127	15	5·8092506	7·0791830	15	5·7989050	7·0664855
16	5·8108319	7·0803559	16	5·8005803	7·0678654	16	5·7902347	7·0552067
17	5·8019611	7·0688073	17	5·7917095	7·0563564	17	5·7813639	7·0437384
18	5·7928406	7·0570644	18	5·7825890	7·0446547	18	5·7722434	7·0320778
19	5·7834348	7·0441304	19	5·7731832	7·0327618	19	5·7628376	7·0202275
20	5·7737210	7·0330078	20	5·7634694	7·0206817	20	5·7531238	7·0081904
21	5·7636898	7·0207018	21	5·7534382	7·0084192	21	5·7430926	6·9959718
22	5·7535782	7·0082194	22	5·7433266	6·9959803	22	5·7329810	6·9835784
23	5·7433889	6·9955532	23	5·7331373	6·9833586	23	5·7227917	6·9710022
24	5·7331237	6·9826958	24	5·7228721	6·9705462	24	5·7125265	6·9582361
25	5·7227836	6·9696390	25	5·7125320	6·9575346	25	5·7021864	6·9452714
26	5·7123687	6·9563742	26	5·7021171	6·9443152	26	5·6917715	6·9320993
27	5·7018783	6·9428921	27	5·6916267	6·9308786	27	5·6812811	6·9187102
28	5·6913108	6·9291823	28	5·6810592	6·9172150	28	5·6707136	6·9050941
29	5·6806640	6·9152352	29	5·6704124	6·9033130	29	5·6600668	6·8912402
30	5·6699346	6·9010395	30	5·6596830	6·8891627	30	5·6493374	6·8771369
31	5·6591186	6·8865837	31	5·6488670	6·8747515	31	5·6385214	6·8627731
32	5·6482111	6·8718552	32	5·6379595	6·8600676	32	5·6276139	6·8481356
33	5·6372064	6·8568410	33	5·6269548	6·8450974	33	5·6166092	6·8332120
34	5·6260980	6·8415282	34	5·6158464	6·8298271	34	5·6055008	6·8179875
35	5·6148785	6·8259015	35	5·6046269	6·8142430	35	5·5942813	6·8024480
36	5·6035397	6·8099462	36	5·5932881	6·7983291	36	5·5829425	6·7865784
37	5·5920725	6·7936459	37	5·5818209	6·7820695	37	5·5714753	6·7703617
38	5·5804671	6·7769836	38	5·5702155	6·7654469	38	5·5598699	6·7537815
39	5·5687127	6·7599414	39	5·5584611	6·7484431	39	5·5481155	6·7368190
40	5·5567979	6·7425000	40	5·5465463	6·7310394	40	5·5362007	6·7194553
41	5·5447102	6·7246389	41	5·5344586	6·7132152	41	5·5241130	6·7016702
42	5·5324364	6·7063368	42	5·5221848	6·6949484	42	5·5118392	6·6834417
43	5·5199624	6·6875704	43	5·5097108	6·6762167	43	5·4993652	6·6647465
44	5·5072735	6·6683155	44	5·4970219	6·6569950	44	5·4866763	6·6455606
45	5·4943538	6·6485447	45	5·4841022	6·6372570	45	5·4737566	6·6258571
46	5·4811868	6·6282305	46	5·4709352	6·6169742	46	5·4605896	6·6056082
47	5·4677551	6·6073422	47	5·4575035	6·5961162	47	5·4471579	6·5847826
48	5·4540405	6·5858464	48	5·4437889	6·5746501	48	5·4334433	6·5633479
49	5·4400239	6·5637077	49	5·4297723	6·5525401	49	5·4194267	6·5412687
50	5·4256855	6·5408866	50	5·4154339	6·5297476	50	5·4050883	6·5185054
51	5·4110045	6·5173419	51	5·4007529	6·5062291	51	5·3904073	6·4950162
52	5·3957148	6·4930252	52	5·3854632	6·4819398	52	5·3751176	6·4707539
53	5·3799803	6·4679078	53	5·3697287	6·4568479	53	5·3593831	6·4456900
54	5·3637837	6·4419409	54	5·3535321	6·4309058	54	5·3431865	6·4197739

JOINT LIVES:—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of **Female** (y)	21			22			23	
Age of **Male** (x)	λ $D_{x,\,21}$	λ $N_{x,\,21}$	**Age** of **Male** (x)	λ $D_{x,\,22}$	λ $N_{x,\,22}$	**Age** of **Male** (x)	λ $D_{x,\,23}$	λ $N_{x,\,23}$
55	5·3470978	6·4150696	55	5·3368462	6·4040592	55	5·3265006	6·3929525
56	5·3298849	6·3872341	56	5·3196333	6·3762475	56	5·3092877	6·3651661
57	5·3120969	6·3583676	57	5·3018453	6·3474052	57	5·2914997	6·3363480
58	5·2936754	6·3283992	58	5·2834238	6·3174597	58	5·2730782	6·3064269
59	5·2745518	6·2972511	59	5·2643002	6·2863339	59	5·2539546	6·2753245
60	5·2546470	6·2648386	60	5·2443954	6·2539440	60	5·2340498	6·2429569
61	5·2338717	6·2310713	61	5·2236201	6·2201988	61	5·2132745	6·2092345
62	5·2121262	6·1958529	62	5·2018746	6·1850017	62	5·1915290	6·1740595
63	5·1893005	6·1590788	63	5·1790489	6·1482490	63	5·1687033	6·1373282
64	5·1652743	6·1206394	64	5·1550227	6·1098299	64	5·1446771	6·0989305
65	5·1399169	6·0804165	65	5·1296653	6·0696271	65	5·1193197	6·0587479
66	5·1130873	6·0382840	66	5·1028357	6·0275152	66	5·0924901	6·0166561
67	5·0846342	5·9941103	67	5·0743826	5·9833601	67	5·0640370	5·9725217
68	5·0543961	5·9477542	68	5·0441445	5·9370231	68	5·0337989	5·9262030
69	5·0222008	5·8990661	69	5·0119492	5·8883542	69	5·0016036	5·8775528
70	4·9878662	5·8478890	70	4·9776146	5·8371950	70	4·9672690	5·8264123
71	4·9511996	5·7940568	71	4·9409480	5·7833806	71	4·9306024	5·7726156
72	4·9119980	5·7373943	72	4·9017464	5·7267355	72	4·8914008	5·7159879
73	4·8700483	5·6777171	73	4·8597967	5·6670753	73	4·8494511	5·6563447
74	4·8251267	5·6148315	74	4·8148751	5·6042060	74	4·8045295	5·5934921
75	4·7769994	5·5485342	75	4·7667478	5·5379246	75	4·7564022	5·5272266
76	4·7254220	5·4786113	76	4·7151704	5·4680175	76	4·7048248	5·4573349
77	4·6701401	5·4048400	77	4·6598885	5·3942610	77	4·6495429	5·3835935
78	4·6108887	5·3269856	78	4·6006371	5·3164214	78	4·5902915	5·3057683
79	4·5473926	5·2448042	79	4·5371410	5·2342538	79	4·5267954	5·2236151
80	4·4793662	5·1580403	80	4·4691146	5·1475035	80	4·4587690	5·1368780
81	4·4065136	5·0664270	81	4·3962620	5·0559045	81	4·3859164	5·0452921
82	4·3285285	4·9696894	82	4·3182769	4·9591784	82	4·3079313	4·9485797
83	4·2450946	4·8675376	83	4·2348430	4·8570392	83	4·2244974	4·8464516
84	4·1558848	4·7596716	84	4·1456332	4·7491858	84	4·1352876	4·7386102
85	4·0605620	4·6457817	85	4·0503104	4·6353068	85	4·0399648	4·6247430
86	3·9587786	4·5255446	86	3·9485270	4·5150808	86	3·9381814	4·5045278
87	3·8501768	4·3986271	87	3·8399252	4·3881737	87	3·8295796	4·3776310
88	3·7343884	4·2646826	88	3·7241368	4·2542396	88	3·7137912	4·2437066
89	3·6110350	4·1233531	89	3·6007834	4·1129202	89	3·5904378	4·1023974
90	3·4797275	3·9742693	90	3·4694759	3·9638454	90	3·4591303	3·9533320
91	3·3400670	3·8170475	91	3·3298154	3·8066330	91	3·3194698	3·7961280
92	3·1916439	3·6512926	92	3·1813923	3·6408857	92	3·1710467	3·6303903
93	3·0340384	3·4765911	93	3·0237868	3·4661942	93	3·0134412	3·4557050
94	2·8668203	3·2925163	94	2·8565687	3·2821264	94	2·8462231	3·2716463
95	2·6895492	3·0986143	95	2·6792976	3·0882326	95	2·6689520	3·0777595
96	2·5017743	2·8944013	96	2·4915227	2·8840269	96	2·4811771	2·8735618
97	2·3030344	2·6793406	97	2·2927828	2·6689746	97	2·2824372	2·6585160
98	2·0928581	2·4528058	98	2·0826065	2·4424468	98	2·0722609	2·4319970
99	1·8707637	2·2140002	99	1·8605121	2·2036485	99	1·8501665	2·1932050
100	1·6362589	1·9617788	100	1·6260073	1·9514357	100	1·6156617	1·9410008
101	1·3888414	1·6942629	101	1·3785898	1·6839309	101	1·3682442	1·6735056
102	1·1279984	1·4079005	102	1·1177468	1·3975802	102	1·1074012	1·3871691
103	0·8532068	1·0949670	103	0·8429552	1·0846621	103	0·8326096	1·0742641
104	0·5639332	0·7355670	104	0·5536816	0·7252826	104	0·5433360	0·7149079
105	0·2596338		105	0·2493822		105	0·2390366	
106	9·9397546		106	9·9295030		106	9·9191574	
107	9·6037312		107	9·5934796		107	9·5831340	
108	9·2509889		108	9·2407373		108	9·2303917	
109	8·8809426		109	8·8706910		109	8·8603454	

ENGLISH LIFE TABLE, No. 3.

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x, y}$ and $N_{x, y}$.

Age of **Female** (y)	24		25			26		
Age of **Male** (x)	λ $D_{x, 24}$	λ $N_{x, 24}$	**Age** of **Male** (x)	λ $D_{x, 25}$	λ $N_{x, 23}$	**Age** of **Male** (x)	λ $D_{x, 26}$	λ $N_{x, 26}$
0	6·0568767	7·2219079	0	6·0463510	7·2085126	0	6·0357383	7·1949373
1	5·9728745	7·2045693	1	5·9623488	7·1911441	1	5·9517361	7·1775371
2	5·9375936	7·1917422	2	5·9270679	7·1783181	2	5·9164552	7·1647115
3	5·9154803	7·1802645	3	5·9049546	7·1668524	3	5·8943419	7·1532568
4	5·8985786	7·1693888	4	5·8880529	7·1559939	4	5·8774402	7·1424154
5	5·8843512	7·1588357	5	5·8738255	7·1454622	5	5·8632128	7·1319040
6	5·8719900	7·1484658	6	5·8614643	7·1351165	6	5·8508516	7·1215821
7	5·8608465	7·1381808	7	5·8503208	7·1248578	7	5·8397081	7·1113502
8	5·8504323	7·1279153	8	5·8399066	7·1146207	8	5·8292939	7·1011413
9	5·8406849	7·1176276	9	5·8301592	7·1043635	9	5·8195465	7·0909142
10	5·8314497	7·1072775	10	5·8209240	7·0940459	10	5·8103113	7·0806279
11	5·8225852	7·0968315	11	5·8120595	7·0836330	11	5·8014468	7·0702493
12	5·8139632	7·0862619	12	5·8034375	7·0730986	12	5·7928248	7·0597497
13	5·8054687	7·0755467	13	5·7949430	7·0624195	13	5·7843303	7·0491068
14	5·7969998	7·0646684	14	5·7864741	7·0515785	14	5·7758614	7·0383034
15	5·7884680	7·0536140	15	5·7779423	7·0405628	15	5·7673296	7·0273264
16	5·7797977	7·0423752	16	5·7692720	7·0293644	16	5·7586593	7·0161677
17	5·7709269	7·0309469	17	5·7604012	7·0179774	17	5·7497885	7·0048226
18	5·7618064	7·0193286	18	5·7512807	7·0064011	18	5·7406680	6·9932888
19	5·7524006	7·0075211	19	5·7418749	6·9946370	19	5·7312622	6·9815685
20	5·7426868	6·9955281	20	5·7321611	6·9826886	20	5·7215484	6·9696654
21	5·7326556	6·9833546	21	5·7221299	6·9705611	21	5·7115172	6·9575842
22	5·7225440	6·9710071	22	5·7120183	6·9582605	22	5·7014056	6·9453318
23	5·7123547	6·9584782	23	5·7018290	6·9457796	23	5·6912163	6·9328998
24	5·7020895	6·9457596	24	5·6915638	6·9331104	24	5·6809511	6·9202807
25	5·6917494	6·9328434	25	5·6812237	6·9202439	25	5·6706110	6·9074656
26	5·6813345	6·9197202	26	5·6708088	6·9071711	26	5·6601961	6·8944450
27	5·6708441	6·9063803	27	5·6603184	6·8938825	27	5·6497057	6·8812090
28	5·6602766	6·8928138	28	5·6497509	6·8803673	28	5·6391382	6·8677475
29	5·6496298	6·8790096	29	5·6391041	6·8666151	29	5·6284914	6·8540490
30	5·6389004	6·8649565	30	5·6283747	6·8526138	30	5·6177620	6·8401019
31	5·6280844	6·8506418	31	5·6175587	6·8383516	31	5·6069460	6·8258938
32	5·6171769	6·8360539	32	5·6066512	6·8238149	32	5·5960385	6·8114118
33	5·6061722	6·8211787	33	5·5956465	6·8089914	33	5·5850338	6·7966420
34	5·5950638	6·8060028	34	5·5845381	6·7938662	34	5·5739254	6·7815708
35	5·5838443	6·7905109	35	5·5733186	6·7784249	35	5·5627059	6·7661825
36	5·5725055	6·7746877	36	5·5619798	6·7626515	36	5·5513671	6·7504618
37	5·5610383	6·7585173	37	5·5505126	6·7465294	37	5·5398999	6·7343918
38	5·5494329	6·7419818	38	5·5389072	6·7300422	38	5·5282945	6·7179551
39	5·5376785	6·7250636	39	5·5271528	6·7131706	39	5·5165401	6·7011339
40	5·5257637	6·7077429	40	5·5152380	6·6958960	40	5·5046253	6·6839078
41	5·5136760	6·6899992	41	5·5031503	6·6781972	41	5·4925376	6·6662571
42	5·5014022	6·6718114	42	5·4908765	6·6600526	42	5·4802638	6·6481592
43	5·4889282	6·6531561	43	5·4784025	6·6414395	43	5·4677898	6·6295912
44	5·4762393	6·6340080	44	5·4657136	6·6223329	44	5·4551009	6·6105287
45	5·4633196	6·6143419	45	5·4527939	6·6027060	45	5·4421812	6·5909449
46	5·4501526	6·5941285	46	5·4396269	6·5825313	46	5·4290142	6·5708111
47	5·4367209	6·5733380	47	5·4261952	6·5617778	47	5·4155825	6·5500979
48	5·4230063	6·5519369	48	5·4124806	6·5404131	48	5·4018679	6·5287712
49	5·4089897	6·5298898	49	5·3984640	6·5184006	49	5·3878513	6·5067967
50	5·3946513	6·5071584	50	5·3841256	6·4957025	50	5·3735129	6·4841342
51	5·3799703	6·4836994	51	5·3694446	6·4722763	51	5·3588319	6·4607426
52	5·3646806	6·4594672	52	5·3541549	6·4480752	52	5·3435422	6·4365753
53	5·3489461	6·4344308	53	5·3384204	6·4230699	53	5·3278077	6·4116021
54	5·3327495	6·4085433	54	5·3222238	6·3972108	54	5·3116111	6·3857750

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	24		25			26		
Age of Male (x)	λ $D_{x,\,24}$	λ $N_{x,\,24}$	Age of Male (x)	λ $D_{x,\,25}$	λ $N_{x,\,25}$	Age of Male (x)	λ $D_{x,\,26}$	λ $N_{x,\,26}$
55	5·3160636	6·3817489	55	5·3055379	6·3704456	55	5·2949252	6·3590390
56	5·2988507	6·3539881	56	5·2883250	6·3427124	56	5·2777123	6·3313358
57	5·2810627	6·3251958	57	5·2705370	6·3139463	57	5·2599243	6·3025980
58	5·2626412	6·2952994	58	5·2521155	6·2840761	58	5·2415028	6·2727548
59	5·2435176	6·2642216	59	5·2329919	6·2530235	59	5·2223792	6·2417291
60	5·2236128	6·2318777	60	5·2130871	6·2207050	60	5·2024744	6·2094359
61	5·2028375	6·1981780	61	5·1923118	6·1870289	61	5·1816991	6·1757858
62	5·1810920	6·1630259	62	5·1705663	6·1518998	62	5·1599536	6·1406805
63	5·1582663	6·1263169	63	5·1477406	6·1152140	63	5·1371279	6·1040178
64	5·1342401	6·0879403	64	5·1237144	6·0768599	64	5·1131017	6·0656872
65	5·1088827	6·0477793	65	5·0983570	6·0367199	65	5·0877443	6·0255701
66	5·0820531	6·0057077	66	5·0715274	5·9946699	66	5·0609147	5·9835411
67	5·0536000	5·9615933	67	5·0430743	5·9505756	67	5·0324616	5·9394683
68	5·0233619	5·9152948	68	5·0128362	5·9042973	68	5·0022235	5·8932101
69	4·9911666	5·8666631	69	4·9806409	5·8556850	69	4·9700282	5·8446182
70	4·9568320	5·8155413	70	4·9463063	5·8045822	70	4·9356936	5·7935345
71	4·9201654	5·7617629	71	4·9096397	5·7508222	71	4·8990270	5·7397934
72	4·8809638	5·7051527	72	4·8704381	5·6942300	72	4·8598254	5·6832193
73	4·8390141	5·6455265	73	4·8284884	5·6346209	73	4·8178757	5·6236281
74	4·7940925	5·5826905	74	4·7835668	5·5718019	74	4·7729541	5·5608259
75	4·7459652	5·5164413	75	4·7354395	5·5055688	75	4·7248268	5·4946095
76	4·6943878	5·4465650	76	4·6838621	5·4357086	76	4·6732494	5·4247651
77	4·6391059	5·3728386	77	4·6285802	5·3619972	77	4·6179675	5·3510697
78	4·5798545	5·2950280	78	4·5693288	5·2842013	78	4·5587161	5·2732884
79	4·5163584	5·2128889	79	4·5058327	5·2020762	79	4·4952200	5·1911777
80	4·4483320	5·1261659	80	4·4378063	5·1153669	80	4·4271936	5·1044820
81	4·3754794	5·0345924	81	4·3649537	5·0238070	81	4·3543410	5·0129355
82	4·2974943	4·9378924	82	4·2869686	4·9271192	82	4·2763559	4·9162607
83	4·2140604	4·8357774	83	4·2035347	4·8250163	83	4·1929220	4·8141697
84	4·1248506	4·7279469	84	4·1143249	4·7171985	84	4·1037122	4·7063627
85	4·0295278	4·6140912	85	4·0190021	4·6033533	85	4·0083894	4·5925309
86	3·9277444	4·4938869	86	3·9172187	4·4831599	86	3·9066060	4·4723472
87	3·8191426	4·3670006	87	3·8086169	4·3562838	87	3·7980042	4·3454818
88	3·7033542	4·2330860	88	3·6928285	4·2223796	88	3·6822158	4·2115871
89	3·5800008	4·0917858	89	3·5694751	4·0810884	89	3·5588624	4·0703061
90	3·4486933	3·9427301	90	3·4381676	3·9320413	90	3·4275549	3·9212676
91	3·3090328	3·7855356	91	3·2985071	3·7748555	91	3·2878944	3·7640902
92	3·1606097	3·6198048	92	3·1500840	3·6091342	92	3·1394713	3·5983768
93	3·0030042	3·4451292	93	2·9924785	3·4344657	93	2·9818658	3·4237172
94	2·8357861	3·2610773	94	2·8252604	3·2504222	94	2·8146477	3·2396808
95	2·6585150	3·0671985	95	2·6479893	3·0565502	95	2·6373766	3·0458173
96	2·4707401	2·8630074	96	2·4602144	2·8523672	96	2·4496017	2·8416404
97	2·2720002	2·6479695	97	2·2614745	2·6373356	97	2·2508618	2·6266165
98	2·0618239	2·4214575	98	2·0512982	2·4108312	98	2·0406855	2·4001182
99	1·8397295	2·1826737	99	1·8292038	2·1720551	99	1·8185911	2·1613497
100	1·6052247	1·9304763	100	1·5946990	1·9198665	100	1·5840863	1·9091703
101	1·3578072	1·6629910	101	1·3472815	1·6523885	101	1·3366688	1·6417031
102	1·0969642	1·3766664	102	1·0864385	1·3660754	102	1·0758258	1·3553978
103	0·8221726	1·0637836	103	0·8116469	1·0532053	103	0·8010342	1·0425440
104	0·5328990	0·7044337	104	0·5223733	0·6938940	104	0·5117606	0·6832452
105	0·2285996		105	0·2180739		105	0·2074612	
106	9·9087204		106	9·8981947		106	9·8875820	
107	9·5726970		107	9·5621713		107	9·5515586	
108	9·2199547		108	9·2094290		108	9·1988163	
109	8·8499084		109	8·8393827		109	8·8287700	

ENGLISH LIFE TABLE, No. 3.

JOINT LIVES:—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of **Female** (*y*)	27		28			29		
Age of **Male** (*x*)	λ $D_{x,\,27}$	λ $N_{x,\,27}$	**Age** of **Male** (*x*)	λ $D_{x,\,28}$	λ $N_{x,\,28}$	**Age** of **Male** (*x*)	λ $D_{x,\,29}$	λ $N_{x,\,29}$
0	6·0250403	7·1811768	0	6·0142580	7·1672243	0	6·0033919	7·1530724
1	5·9410381	7·1637420	1	5·9302558	7·1497525	1	5·9193897	7·1355610
2	5·9057572	7·1509160	2	5·8949749	7·1369244	2	5·8841088	7·1227298
3	5·8836439	7·1394717	3	5·8728616	7·1254901	3	5·8619955	7·1113041
4	5·8667422	7·1286464	4	5·8559599	7·1146807	4	5·8450938	7·1005105
5	5·8525148	7·1181559	5	5·8417325	7·1042098	5	5·8308664	7·0900590
6	5·8401536	7·1078572	6	5·8293713	7·0939346	6	5·8185052	7·0798066
7	5·8290101	7·0976511	7	5·8182278	7·0837538	7	5·8073617	7·0696516
8	5·8185959	7·0874705	8	5·8078136	7·0736011	8	5·7969475	7·0595260
9	5·8088485	7·0772734	9	5·7980062	7·0634340	9	5·7872001	7·0493883
10	5·7996133	7·0670192	10	5·7888310	7·0532110	10	5·7779649	7·0391968
11	5·7907488	7·0566735	11	5·7799665	7·0428987	11	5·7691004	7·0289172
12	5·7821268	7·0462088	12	5·7713445	7·0324685	12	5·7604784	7·0185217
13	5·7736323	7·0356018	13	5·7628500	7·0218977	13	5·7519839	7·0079866
14	5·7651634	7·0248357	14	5·7543811	7·0111690	14	5·7435150	6·9972952
15	5·7566316	7·0138977	15	5·7458493	7·0002696	15	5·7349832	6·9864344
16	5·7479613	7·0027793	16	5·7371790	6·9891911	16	5·7263129	6·9753959
17	5·7390905	6·9914753	17	5·7283082	6·9779288	17	5·7174421	6·9641748
18	5·7299700	6·9799847	18	5·7191877	6·9664812	18	5·7083216	6·9527705
19	5·7205642	6·9683087	19	5·7097819	6·9548498	19	5·6989158	6·9411837
20	5·7108504	6·9564510	20	5·7000681	6·9430382	20	5·6892020	6·9294185
21	5·7008192	6·9444171	21	5·6900369	6·9310517	21	5·6791708	6·9174800
22	5·6907076	6·9322131	22	5·6799253	6·9188970	22	5·6690592	6·9053748
23	5·6805183	6·9198314	23	5·6697360	6·9065659	23	5·6588699	6·8930952
24	5·6702531	6·9072635	24	5·6594708	6·8940505	24	5·6486047	6·8806327
25	5·6599130	6·8945009	25	5·6491307	6·8813414	25	5·6382646	6·8679784
26	5·6494981	6·8815339	26	5·6387158	6·8684293	26	5·6278497	6·8551224
27	5·6390077	6·8683525	27	5·6282254	6·8553039	27	5·6173593	6·8420543
28	5·6284402	6·8549459	28	5·6176579	6·8419544	28	5·6067918	6·8287635
29	5·6177934	6·8413033	29	5·6070111	6·8283694	29	5·5961450	6·8152380
30	5·6070640	6·8274124	30	5·5962817	6·8145370	30	5·5854156	6·8014660
31	5·5962480	6·8132611	31	5·5854657	6·8004444	31	5·5745996	6·7874344
32	5·5853405	6·7988357	32	5·5745582	6·7860783	32	5·5636921	6·7731301
33	5·5743358	6·7841231	33	5·5635535	6·7714250	33	5·5526874	6·7585386
34	5·5632274	6·7691079	34	5·5524451	6·7564696	34	5·5415790	6·7436452
35	5·5520079	6·7537760	35	5·5412256	6·7411963	35	5·5303595	6·7284345
36	5·5406691	6·7381108	36	5·5298868	6·7255901	36	5·5190207	6·7128895
37	5·5292019	6·7220961	37	5·5184196	6·7096331	37	5·5075535	6·6969943
38	5·5175965	6·7057135	38	5·5068142	6·6933086	38	5·4959481	6·6807304
39	5·5058421	6·6889451	39	5·4950598	6·6765967	39	5·4841937	6·6640789
40	5·4939273	6·6717716	40	5·4831450	6·6594784	40	5·4722789	6·6470198
41	5·4818396	6·6541715	41	5·4710573	6·6419334	41	5·4601912	6·6295324
42	5·4695658	6·6361240	42	5·4587835	6·6239385	42	5·4479174	6·6115952
43	5·4570918	6·6176045	43	5·4463095	6·6054718	43	5·4354434	6·5931836
44	5·4444029	6·5985890	44	5·4336206	6·5865070	44	5·4227545	6·5742737
45	5·4314832	6·5790512	45	5·4207009	6·5670181	45	5·4098348	6·5548378
46	5·4183162	6·5589622	46	5·4075339	6·5469772	46	5·3966678	6·5348478
47	5·4048845	6·5382915	47	5·3941022	6·5263530	47	5·3832361	6·5142740
48	5·3911699	6·5170069	48	5·3803876	6·5051127	48	5·3695215	6·4930822
49	5·3771533	6·4950719	49	5·3663710	6·4832213	49	5·3555049	6·4712371
50	5·3628149	6·4724488	50	5·3520326	6·4606395	50	5·3411665	6·4487006
51	5·3481339	6·4490941	51	5·3373516	6·4373258	51	5·3264855	6·4254298
52	5·3328442	6·4249627	52	5·3220619	6·4132323	52	5·3111958	6·4013790
53	5·3171097	6·4000243	53	5·3063274	6·3883312	53	5·2954613	6·3765174
54	5·3009131	6·3742304	54	5·2901308	6·3625735	54	5·2792647	6·3507985

JOINT LIVES:—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of **Female** (*y*)	27			28			29	
Age of **Male** (*x*)	$\lambda\ D_{x,\,27}$	$\lambda\ N_{x,\,27}$	**Age** of **Male** (*x*)	$\lambda\ D_{x,\,28}$	$\lambda\ N_{x,\,28}$	**Age** of **Male** (*x*)	$\lambda\ D_{x,\,29}$	$\lambda\ N_{x,\,29}$
55	5·2842272	6·3475274	55	5·2734449	6·3359048	55	5·2625788	6·3241671
56	5·2670143	6·3198545	56	5·2562320	6·3082657	56	5·2453659	6·2965636
57	5·2492263	6·2911475	57	5·2384440	6·2795901	57	5·2275779	6·2679230
58	5·2308048	6·2613333	58	5·2200225	6·2498077	58	5·2091564	6·2381726
59	5·2116812	6·2303350	59	5·2008989	6·2188392	59	5·1900328	6·2072371
60	5·1917764	6·1980693	60	5 1809941	6·1866015	60	5·1701280	6·1750300
61	5·1710011	6·1644451	61	5·1602188	6·1530055	61	5·1493527	6·1414626
62	5·1492556	6·1293664	62	5·1384733	6·1179531	62	5·1270072	6·1064391
63	5·1264299	6·0927276	63	5·1156476	6·0813416	63	5·1047815	6·0698545
64	5·1024037	6·0544204	64	5·0916214	6·0430588	64	5·0807553	6·0315996
65	5·0770463	6·0143273	65	5·0662640	6·0029889	65	5·0553979	5·9915543
66	5·0502167	5·9723209	66	5·0394344	5·9610070	66	5·0285683	5·9495964
67	5·0217636	5·9282698	67	5·0109813	5·9169784	67	5·0001152	5·9055924
68	4·9915255	5·8820330	68	4·9807432	5·8707636	68	4·9698771	5·8594001
69	4·9593302	5·8334614	69	4·9485479	5·8222133	69	4·9376818	5·8108721
70	4·9249956	5·7823978	70	4·9142133	5·7711703	70	4·9033472	5·7598504
71	4·8883290	5·7286757	71	4·8775467	5·7174682	71	4·8666806	5·7061688
72	4·8491274	5·6721204	72	4·8383451	5·6609318	72	4·8274790	5·6496525
73	4·8071777	5·6125473	73	4·7963954	5·6013775	73	4·7855293	5·5901170
74	4·7622561	5·5497626	74	4·7514738	5·5386108	74	4·7406077	5·5273691
75	4·7141288	5·4835629	75	4·7033465	5·4724285	75	4·6924804	5·4612046
76	4·6625514	5·4137350	76	4·6517691	5·4026171	76	4·6409030	5·3914104
77	4·6072695	5·3400551	77	4·5964872	5·3289533	77	4·5856211	5·3177629
78	4·5480181	5·2622894	78	4·5372358	5·2512030	78	4·5263697	5·2400288
79	4·4845220	5·1801930	79	4·4737397	5·1691220	79	4·4628736	5·1579627
80	4·4164956	5·0935114	80	4·4057133	5·0824543	80	4·3948472	5·0713105
81	4·3436430	5·0019781	81	4·3328607	4·9909348	81	4·3219946	4·9798046
82	4·2656579	4·9053166	82	4·2548756	4·8942862	82	4·2440095	4·8831695
83	4 1822240	4·8032378	83	4·1714417	4·7922207	83	4·1605756	4·7811160
84	4·0930142	4·6954432	84	4·0822319	4·6844378	84	4·0713658	4·6733463
85	3·9976914	4·5816210	85	3·9869091	4·5706272	85	3·9760430	4·5595476
86	3·8959080	4·4614498	86	3·8851257	4·4504668	86	3·8742596	4·4393983
87	3·7873062	4·3345945	87	3·7765239	4·3236224	87	3·7656578	4·3125645
88	3·6715178	4·2007101	88	3·6607355	4·1897480	88	3·6498694	4·1787007
89	3·5481644	4·0594384	89	3·5373821	4·0484861	89	3·5265160	4·0374485
90	3·4168569	3·9104098	90	3·4060746	3·8994665	90	3·3952085	3·8884385
91	3·2771964	3·7532405	91	3·2664141	3·7423071	91	3·2555480	3·7312873
92	3·1287733	3·5875359	92	3·1179910	3·5766097	92	3·1071249	3·5655999
93	2·9711678	3·4128836	93	2·9603855	3·4019660	93	2·9495194	3·3909636
94	2·8039497	3·2288552	94	2·7931674	3·2179449	94	2·7823013	3·2069504
95	2·6266786	3·0349984	95	2·6158963	3·0240960	95	2·6050302	3·0131087
96	2·4389037	2·8308305	96	2·4281214	2·8199340	96	2·4172553	2·8089546
97	2·2401638	2·6158123	97	2·2293815	2·6049255	97	2·2185154	2·5939514
98	2·0299875	2·3893221	98	2·0192052	2·3784397	98	2·0083391	2·3674771
99	1·8078931	2·1505605	99	1·7971108	2·1396871	99	1·7862447	2·1287295
100	1·5733883	1·8983884	100	1·5626060	1·8875228	100	1·5517399	1·8765735
101	1·3259708	1·6309311	101	1·3151885	1·6200746	101	1·3043224	1·6091342
102	1·0651278	1·3446398	102	1·0543455	1·3337958	102	1·0434794	1·3228661
103	0·7903362	1·0317962	103	0·7795539	1·0209700	103	0·7686878	1·0100582
104	0·5010626	0·6725227	104	0·4902803	0·6617086	104	0·4794142	0·6508222
105	0·1967632		105	0·1859809		105	0·1751148	
106	9·8768840		106	9 8661017		106	9·8552356	
107	9·5408606		107	9·5300783		107	9·5192122	
108	9·1881183		108	9·1773360		108	9·1664699	
109	8·8180720		109	8·8072897		109	8·7964236	

JOINT LIVES:—Male and Female Life.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of **Female** (y)	30			31			32	
Age of **Male** (x)	$\lambda\ D_{x,\,30}$	$\lambda\ N_{x,\,30}$	**Age** of **Male** (x)	$\lambda\ D_{x,\,31}$	$\lambda\ N_{x,\,31}$	**Age** of **Male** (x)	$\lambda\ D_{x,\,32}$	$\lambda\ N_{x,\,32}$
0	5·9924420	7·1387134	0	5·9814081	7·1241392	0	5·9702893	7·1093403
1	5·9084398	7·1211598	1	5·8974059	7·1065401	1	5·8862871	7·0916920
2	5·8731589	7·1083241	2	5·8621250	7·0936984	2	5·8510062	7·0788435
3	5·8510456	7·0969065	3	5·8400117	7·0822880	3	5·8288929	7·0674395
4	5·8341439	7·0861274	4	5·8231100	7·0715231	4	5·8119912	7·0566876
5	5·8199165	7·0756951	5	5·8088826	7·0611094	5	5·7977638	7·0462927
6	5·8075553	7·0654652	6	5·7965214	7·0509016	6	5·7854026	7·0361062
7	5·7964118	7·0553348	7	5·7853779	7·0407962	7	5·7742591	7·0260252
8	5·7859976	7·0452369	8	5·7749637	7·0307252	8	5·7638449	7·0159810
9	5·7762502	7·0351282	9	5·7652163	7·0206456	9	5·7540975	7·0059300
10	5·7670150	7·0249683	10	5·7559811	7·0105158	10	5·7448623	6·9958312
11	5·7581505	7·0147214	11	5·7471166	7·0003017	11	5·7359978	6·9856489
12	5·7495285	7·0043598	12	5·7384946	6·9899740	12	5·7273758	6·9753549
13	5·7410340	6·9938603	13	5·7300001	6·9795100	13	5·7188813	6·9649262
14	5·7325651	6·9832059	14	5·7215312	6·9688924	14	5·7104124	6·9543450
15	5·7240333	6·9723837	15	5·7129994	6·9581084	15	5·7018806	6·9435989
16	5·7153630	6·9613849	16	5·7043291	6·9471495	16	5·6932103	6·9326794
17	5·7064922	6·9502055	17	5·6954583	6·9360111	17	5·6843395	6·9215822
18	5·6973717	6·9388437	18	5·6863378	6·9246922	18	5·6752190	6·9103059
19	5·6879659	6·9273017	19	5·6769320	6·9131945	19	5·6658132	6·8988526
20	5·6782521	6·9155829	20	5·6672182	6·9015222	20	5·6560994	6·8872264
21	5·6682209	6·9036928	21	5·6571870	6·8896805	21	5·6460682	6·8754331
22	5·6581093	6·8916376	22	5·6470754	6·8776759	22	5·6359566	6·8634789
23	5·6479200	6·8794098	23	5·6368861	6·8655004	23	5·6257673	6·8513563
24	5·6376548	6·8670012	24	5·6266209	6·8531458	24	5·6155021	6·8390565
25	5·6273147	6·8544022	25	5·6162808	6·8406033	25	5·6051620	6·8265705
26	5·6165998	6·8416035	26	5·6058659	6·8278624	26	5·5947471	6·8138886
27	5·6064094	6·8285941	27	5·5953755	6·8149129	27	5·5842567	6·8009996
28	5·5958419	6·8153633	28	5·5848080	6·8017433	28	5·5736892	6·7878928
29	5·5851951	6·8018992	29	5·5741612	6·7883422	29	5·5630424	6·7745557
30	5·5744657	6·7881894	30	5·5634318	6·7746966	30	5·5523130	6·7609759
31	5·5636497	6·7742210	31	5·5526158	6·7607935	31	5·5414970	6·7471400
32	5·5527422	6·7599806	32	5·5417083	6·7466190	32	5·5305895	6·7330339
33	5·5417375	6·7454536	33	5·5307036	6·7321590	33	5·5195848	6·7186430
34	5·5306291	6·7306251	34	5·5195952	6·7173979	34	5·5084764	6·7039520
35	5·5194096	6·7154793	35	5·5083757	6·7023200	35	5·4972569	6·6889447
36	5·5080708	6·6999997	36	5·4970369	6·6869085	36	5·4859181	6·6736043
37	5·4966036	6·6841688	37	5·4855697	6·6711460	37	5·4744509	6·6579130
38	5·4849982	6·6679691	38	5·4739643	6·6550136	38	5·4628455	6·6418524
39	5·4732138	6·6513812	39	5·4622099	6·6384932	39	5·4510911	6·6254024
40	5·4613290	6·6343855	40	5·4502951	6·6215638	40	5·4391763	6·6085436
41	5·4492413	6·6169600	41	5·4382074	6·6042046	41	5·4270886	6·5912541
42	5·4369675	6·5990831	42	5·4259336	6·5863925	42	5·4148148	6·5735115
43	5·4244935	6·5807317	43	5·4134596	6·5681042	43	5·4023408	6·5552909
44	5·4118046	6·5618794	44	5·4007707	6·5493150	44	5·3896519	6·5365678
45	5·3988849	6·5425011	45	5·3878510	6·5299969	45	5·3767322	6·5173156
46	5·3857179	6·5225664	46	5·3746840	6·5101225	46	5·3635652	6·4975044
47	5·3722862	6·5020457	47	5·3612523	6·4896597	47	5·3501335	6·4771045
48	5·3585716	6·4809065	48	5·3475377	6·4685760	48	5·3364189	6·4560815
49	5·3445550	6·4591119	49	5·3335211	6·4468364	49	5·3224023	6·4343999
50	5·3302166	6·4366237	50	5·3191827	6·4244009	50	5·3080639	6·4120218
51	5·3155356	6·4134000	51	5·3045017	6·4012277	51	5·2933829	6·3889036
52	5·3002459	6·3893940	52	5·2892120	6·3772707	52	5·2780932	6·3649995
53	5·2845114	6·3645769	53	5·2734775	6·3525003	53	5·2623587	6·3402803
54	5·2683148	6·3388990	54	5·2572809	6·3268686	54	5·2461621	6·3146973

JOINT LIVES:—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	30		31			32		
Age of Male (x)	λ $D_{x,\,30}$	λ $N_{x,\,30}$	Age of Male (x)	λ $D_{x,\,31}$	λ $N_{x,\,31}$	Age of Male (x)	λ $D_{x,\,32}$	λ $N_{x,\,32}$
55	5·2516289	6·3123079	55	5·2405950	6·3003202	55	5·2294762	6·2881973
56	5·2344160	6·2847434	56	5·2233821	6·2727976	56	5·2122633	6·2607190
57	5·2166280	6·2561393	57	5·2055941	6·2442341	57	5·1944753	6·2321992
58	5·1982065	6·2264254	58	5·1871726	6·2145581	58	5·1760538	6·2025651
59	5·1790829	6·1955227	59	5·1680490	6·1836931	59	5·1569302	6·1717394
60	5·1591781	6·1633498	60	5·1481442	6·1515540	60	5·1370254	6·1396395
61	5·1384028	6·1298139	61	5·1273689	6·1180533	61	5·1162501	6·1061739
62	5·1166573	6·0948197	62	5·1056234	6·0830915	62	5·0945046	6·0712481
63	5·0938316	6·0582646	63	5·0827977	6·0465667	63	5·0716789	6·0347567
64	5·0698054	6·0200371	64	5·0587715	6·0083694	64	5·0476527	5·9965905
65	5·0444480	5·9800202	65	5·0334141	5·9683807	65	5·0222953	5·9566328
66	5·0176184	5·9380872	66	5·0065845	5·9264762	66	4·9954657	5·9147572
67	4·9891653	5·8941079	67	4·9781314	5·8825224	67	4·9670126	5·8708319
68	4·9589272	5·8479399	68	4·9478933	5·8363799	68	4·9367745	5·8247161
69	4·9267319	5·7994350	69	4·9156980	5·7878991	69	4·9045792	5·7762611
70	4·8923973	5·7484356	70	4·8813634	5·7369231	70	4·8702446	5·7253094
71	4·8557307	5·6947756	71	4·8446968	5·6832857	71	4·8335780	5·6716957
72	4·8165291	5·6382799	72	4·8054952	5·6268117	72	4·7943764	5·6152446
73	4·7745794	5·5787644	73	4·7635455	5·5673170	73	4·7524267	5·5557715
74	4·7296578	5·5160353	74	4·7186239	5·5046079	74	4·7075051	5·4930833
75	4·6815305	5·4498897	75	4·6704966	5·4384809	75	4·6593778	5·4269764
76	4·6299531	5·3801133	76	4·6189192	5·3687232	76	4·6078004	5·3572373
77	4·5746712	5·3064830	77	4·5636373	5·2951106	77	4·5525185	5·2836436
78	4·5154198	5·2287647	78	4·5043859	5·2174094	78	4·4932671	5·2059599
79	4·4519237	5·1467145	79	4·4408898	5·1353754	79	4·4297710	5·1239427
80	4·3838973	5·0600771	80	4·3728634	5·0487537	80	4·3617446	5·0373369
81	4·3110447	4·9685866	81	4·3000108	4·9572773	81	4·2888920	4·9458766
82	4·2330596	4·8719651	82	4·2220257	4·8606709	82	4·2109069	4·8492843
83	4·1496257	4·7699250	83	4·1385918	4·7586447	83	4·1274730	4·7472727
84	4·0604159	4·6621664	84	4·0493820	4·6508998	84	4·0382632	4·6395413
85	3·9650931	4·5483806	85	3·9540592	4·5371254	85	3·9429404	4·5257799
86	3·8633097	4·4282432	86	3·8522758	4·4169996	86	3·8411570	4·4056663
87	3·7547079	4·3014202	87	3·7436740	4·2901885	87	3·7325552	4·2788665
88	3·6389195	4·1675666	88	3·6278856	4·1563456	88	3·6167668	4·1450350
89	3·5155661	4·0263253	89	3·5045322	4·0151137	89	3·4934134	4·0038137
90	3·3842586	3·8773241	90	3·3732247	3·8661237	90	3·3621059	3·8548330
91	3·2445981	3·7201824	91	3·2335642	3·7089908	91	3·2224454	3·6977113
92	3·0961750	3·5545037	92	3·0851411	3·5433204	92	3·0740223	3·5320495
93	2·9385695	3·3798754	93	2·9275356	3·3687017	93	2·9164168	3·3574393
94	2·7713514	3·1958709	94	2·7603175	3·1847045	94	2·7491987	3·1734511
95	2·5940803	3·0020368	95	2·5830464	2·9908790	95	2·5719276	2·9796326
96	2·4063054	2·7978898	96	2·3952715	2·7867393	96	2·3841527	2·7755019
97	2·2075655	2·5828948	97	2·1965316	2·5717519	97	2·1854128	2·5605212
98	1·9973892	2·3564257	98	1·9863553	2·3452906	98	1·9752365	2·3340680
99	1·7752948	2·1176872	99	1·7642609	2·1065597	99	1·7531421	2·0953458
100	1·5407900	1·8655398	100	1·5297561	1·8544202	100	1·5186373	1·8432153
101	1·2933725	1·5981095	101	1·2823386	1·5870012	101	1·2712198	1·5758042
102	1·0325295	1·3118534	102	1·0214956	1·3007563	102	1·0103768	1·2895734
103	0·7577379	0·9990566	103	0·7467040	0·9879745	103	0·7355852	0·9768083
104	0·4684643	0·6398449	104	0·4574304	0·6287771	104	0·4463116	0·6176293
105	0·1641649		105	0·1531310		105	0·1420122	
106	9·8442857		106	9·8332518		106	9·8221330	
107	9·5082623		107	9·4972284		107	9·4861096	
108	9·1555200		108	9·1444861		108	9·1333673	
109	8·7854737		109	8·7744398		109	8·7633210	

ENGLISH LIFE TABLE, No. 3.

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of Female (y)	33		34			35		
Age of Male (x)	λ $D_{x,33}$	λ $N_{x,33}$	Age of Male (x)	λ $D_{x,34}$	λ $N_{x,34}$	Age of Male (x)	λ $D_{x,35}$	λ $N_{x,35}$
0	5·9590842	7·0943073	0	5·9477911	7·0790293	0	5·9364077	7·0634944
1	5·8750820	7·0766066	1	5·8637889	7·0612723	1	5·8524055	7·0456777
2	5·8398011	7·0637491	2	5·8285080	7·0484042	2	5·8171246	7·0327976
3	5·8176878	7·0523507	3	5·8063947	7·0370104	3	5·7950113	7·0214073
4	5·8007861	7·0416118	4	5·7894930	7·0262840	4	5·7781096	7·0106921
5	5·7865587	7·0312339	5	5·7752656	7·0159233	5	5·7638822	7·0003482
6	5·7741975	7·0210689	6	5·7629044	7·0057788	6	5·7515210	6·9902245
7	5·7630540	7·0110124	7	5·7517609	6·9957461	7	5·7403775	6·9802149
8	5·7526398	7·0009947	8	5·7413467	6·9857544	8	5·7299633	6·9702493
9	5·7428924	6·9909723	9	5·7315993	6·9757606	9	5·7202159	6·9602832
10	5·7336572	6·9809035	10	5·7223641	6·9657219	10	5·7109807	6·9502745
11	5·7247927	6·9707532	11	5·7134996	6·9556030	11	5·7021162	6·9401872
12	5·7161707	6·9604923	12	5·7048776	6·9453755	12	5·6934942	6·9299922
13	5·7076762	6·9500984	13	5·6963831	6·9350160	13	5·6849997	6·9196670
14	5·6992073	6·9395537	14	5·6879142	6·9245070	14	5·6765308	6·9091934
15	5·6906755	6·9288451	15	5·6793824	6·9138359	15	5·6679990	6·8985592
16	5·6820052	6·9179646	16	5·6707121	6·9029941	16	5·6593287	6·8877561
17	5·6731344	6·9069081	17	5·6618413	6·8919779	17	5·6504579	6·8767795
18	5·6640139	6·8956743	18	5·6527208	6·8807861	18	5·6413374	6·8656294
19	5·6546081	6·8842652	19	5·6433150	6·8694211	19	5·6319316	6·8543076
20	5·6448943	6·8726851	20	5·6336012	6·8578867	20	5·6222178	6·8428191
21	5·6348631	6·8609398	21	5·6235700	6·8461894	21	5·6121866	6·8311696
22	5·6247515	6·8490362	22	5·6134584	6·8343361	22	5·6020750	6·8193664
23	5·6145622	6·8369665	23	5·6032691	6·8223192	23	5·5918857	6·8074019
24	5·6042970	6·8247218	24	5·5930039	6·8101298	24	5·5816205	6·7952678
25	5·5939569	6·8122930	25	5·5826638	6·7977586	25	5·5712804	6·7829543
26	5·5835420	6·7996703	26	5·5722489	6·7851957	26	5·5608655	6·7704518
27	5·5730516	6·7868430	27	5·5617585	6·7724304	27	5·5503751	6·7577491
28	5·5624841	6·7737996	28	5·5511910	6·7594515	28	5·5398076	6·7448350
29	5·5518373	6·7605281	29	5·5405442	6·7462463	29	5·5291608	6·7316973
30	5·5411079	6·7470153	30	5·5298148	6·7328023	30	5·5184314	6·7183228
31	5·5302919	6·7332484	31	5·5189988	6·7191056	31	5·5076154	6·7046981
32	5·5193844	6·7192126	32	5·5080913	6·7051420	32	5·4967079	6·6908079
33	5·5083797	6·7048933	33	5·4970866	6·6908962	33	5·4857032	6·6766378
34	5·4972713	6·6902746	34	5·4859782	6·6763526	34	5·4745948	6·6621714
35	5·4860518	6·6753407	35	5·4747587	6·6614947	35	5·4633753	6·6473919
36	5·4747130	6·6600743	36	5·4634199	6·6463051	36	5·4520365	6·6322819
37	5·4632458	6·6444575	37	5·4519527	6·6307657	37	5·4405693	6·6168232
38	5·4516404	6·6284715	38	5·4403473	6·6148576	38	5·4289639	6·6009963
39	5·4398860	6·6120968	39	5·4285929	6·5985610	39	5·4172095	6·5847813
40	5·4279712	6·5953118	40	5·4166781	6·5818549	40	5·4052947	6·5681571
41	5·4158835	6·5780962	41	5·4045904	6·5647167	41	5·3932070	6·5511015
42	5·4036097	6·5604264	42	5·3923166	6·5471245	42	5·3809332	6·5335903
43	5·3911357	6·5422786	43	5·3798426	6·5290532	43	5·3684592	6·5156004
44	5·3784468	6·5236265	44	5·3671537	6·5104774	44	5·3557703	6·4971047
45	5·3655271	6·5044437	45	5·3542340	6·4913688	45	5·3428506	6·4780761
46	5·3523601	6·4847015	46	5·3410670	6·4716992	46	5·3296836	6·4584847
47	5·3389284	6·4643678	47	5·3276353	6·4514379	47	5·3162519	6·4382994
48	5·3252138	6·4434106	48	5·3139207	6·4305501	48	5·3025373	6·4174874
49	5·3111972	6·4217926	49	5·2999041	6·4090010	49	5·2885207	6·3960111
50	5·2968588	6·3994754	50	5·2855657	6·3867504	50	5·2741823	6·3738326
51	5·2821778	6·3764171	51	5·2708847	6·3637560	51	5·2595013	6·3509079
52	5·2668881	6·3525705	52	5·2555950	6·3399719	52	5·2442116	6·3271909
53	5·2511536	6·3279065	53	5·2398605	6·3153682	53	5·2284771	6·3026526
54	5·2349570	6·3023771	54	5·2236639	6·2898965	54	5·2122805	6·2772442

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x, y}$ and $N_{x, y}$.

Age of Female (y)	33			34			35	
Age of Male (x)	λ $D_{x, 33}$	λ $N_{x, 33}$	Age of Male (x)	λ $D_{x, 34}$	λ $N_{x, 34}$	Age of Male (x)	λ $D_{x, 35}$	λ $N_{x, 35}$
55	5·2182711	6·2759279	55	5·2069780	6·2635032	55	5·1955946	6·2509113
56	5·2010582	6·2485000	56	5·1897651	6·2361287	56	5·1783817	6·2235954
57	5·1832702	6·2200265	57	5·1719771	6·2077075	57	5·1605937	6·1952300
58	5·1648487	6·1904379	58	5·1535556	6·1781674	58	5·1421722	6·1657446
59	5·1457251	6·1596559	59	5·1344320	6·1474327	59	5·1230486	6·1350605
60	5·1258203	6·1275965	60	5·1145272	6·1154192	60	5·1031438	6·1030960
61	5·1050450	6·0941717	61	5·0937519	6·0820360	61	5·0823685	6·0697607
62	5·0832995	6·0592824	62	5·0720064	6·0471889	62	5·0606230	6·0349571
63	5·0604738	6·0228279	63	5·0491807	6·0107726	63	5·0377973	5·9985841
64	5·0364476	5·9846961	64	5·0251545	5·9726786	64	5·0137711	5·9605303
65	5·0110902	5·9447703	65	4·9997971	5·9327884	65	4·9884137	5·9206788
66	4·9842606	5·9029264	66	4·9729675	5·8909780	66	4·9615841	5·8789049
67	4·9558075	5·8590312	67	4·9445144	5·8471148	67	4·9331310	5·8350762
68	4·9255694	5·8129440	68	4·9142763	5·8010583	68	4·9028929	5·7890528
69	4·8933741	5·7645163	69	4·8820810	5·7526598	69	4·8706976	5·7406857
70	4·8590395	5·7135910	70	4·8477464	5·7017623	70	4·8363630	5·6898182
71	4·8223729	5·6600018	71	4·8110798	5·6481999	71	4·7996964	5·6362842
72	4·7831713	5·6035745	72	4·7718782	5·5917976	72	4·7604948	5·5799092
73	4·7412216	5·5441248	73	4·7299285	5·5323718	73	4·7185451	5·5205087
74	4·6963000	5·4814583	74	4·6850069	5·4697290	74	4·6736235	5·4578903
75	4·6481727	5·4153723	75	4·6368796	5·4036650	75	4·6254962	5·3918501
76	4·5965953	5·3456534	76	4·5853022	5·3339671	76	4·5739188	5·3221744
77	4·5413134	5·2720782	77	4·5300203	5·2604123	77	4·5186369	5·2486406
78	4·4820620	5·1944136	78	4·4707689	5·1827661	78	4·4593855	5·1710149
79	4·4185659	5·1124140	79	4·4072728	5·1007857	79	4·3958894	5·0890527
80	4·3505395	5·0258248	80	4·3392464	5·0142139	80	4·3278630	5·0025004
81	4·2776869	4·9343803	81	4·2663938	4·9227861	81	4·2550104	4·9110899
82	4·1997018	4·8378036	82	4·1884087	4·8262252	82	4·1770253	4·8145459
83	4·1162679	4·7358064	83	4·1049748	4·7242431	83	4·0935914	4·7125799
84	4·0270581	4·6280894	84	4·0157650	4·6165406	84	4·0043816	4·6048921
85	3·9317353	4·5143412	85	3·9204422	4·5028066	85	3·9090588	4·4911729
86	3·8299519	4·3942407	86	3·8186588	4·3827191	86	3·8072754	4·3710991
87	3·7213501	4·2674529	87	3·7100570	4·2559444	87	3·6986736	4·2443372
88	3·6055617	4·1336325	88	3·5942686	4·1221362	88	3·5828852	4·1105419
89	3·4822083	3·9924228	89	3·4709152	3·9809369	89	3·4595318	3·9693548
90	3·3509008	3·8434520	90	3·3396077	3·8319779	90	3·3282243	3·8204064
91	3·2112403	3·6863395	91	3·1999472	3·6748749	91	3·1885638	3·6633145
92	3·0628172	3·5206892	92	3·0515241	3·5092335	92	3·0401407	3·4976828
93	2·9052117	3·3460870	93	2·8939186	3·3346421	93	2·8825352	3·3231017
94	2·7379936	3·1621074	94	2·7267005	3·1506714	94	2·7153171	3·1391402
95	2·5607225	2·9682980	95	2·5494294	2·9568707	95	2·5380460	2·9453484
96	2·3729476	2·7641739	96	2·3616545	2·7527558	96	2·3502711	2·7412423
97	2·1742077	2·5492032	97	2·1629146	2·5377914	97	2·1515312	2·5262876
98	1·9640314	2·3227571	98	1·9527383	2·3113548	98	1·9413549	2·2998582
99	1·7419370	2·0840423	99	1·7306439	2·0726491	99	1·7192605	2·0611617
100	1·5074322	1·8319215	100	1·4961391	1·8205364	100	1·4847557	1·8090592
101	1·2600147	1·5645216	101	1·2487216	1·5531485	101	1·2373382	1·5416803
102	0·9991717	1·2783008	102	0·9878786	1·2669416	102	0·9764952	1·2554896
103	0·7243801	0·9655545	103	0·7130870	0·9542087	103	0·7017036	0·9427717
104	0·4351065	0·6064029	104	0·4238134	0·5950772	104	0·4124300	0·5836634
105	0·1308071		105	0·1195140		105	0·1081306	
106	9·8109279		106	9·7996348		106	9·7882514	
107	9·4749045		107	9·4636114		107	9·4522280	
108	9·1221622		108	9·1108691		108	9·0994857	
109	8·7521159		109	8·7408228		109	8·7294394	

JOINT LIVES:—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\ y}$ and $N_{x,\ y}$.

Age of Female (y)	36		37			38		
Age of Male (x)	$\lambda\ D_{x,\ 36}$	$\lambda\ N_{x,\ 36}$	Age of Male (x)	$\lambda\ D_{x,\ 37}$	$\lambda\ N_{x,\ 37}$	Age of Male (x)	$\lambda\ D_{x,\ 38}$	$\lambda\ N_{x,\ 38}$
0	5·9249312	7·0476914	0	5·9133586	7·0316065	0	5·9016861	7·0152253
1	5·8409290	7·0298102	1	5·8293564	7·0136561	1	5·8176839	6·9972010
2	5·8056481	7·0169160	2	5·7940755	7·0007459	2	5·7824030	6·9842732
3	5·7835348	7·0055280	3	5·7719622	6·9893595	3	5·7602897	6·9728868
4	5·7666331	6·9948235	4	5·7550605	6·9786652	4	5·7433880	6·9622017
5	5·7524057	6·9844959	5	5·7408331	6·9683531	5	5·7291606	6·9519048
6	5·7400445	6·9743925	6	5·7284719	6·9582694	6	5·7167994	6·9418405
7	5·7289010	6·9644064	7	5·7173284	6·9483061	7	5·7056559	6·9318998
8	5·7184868	6·9544660	8	5·7069142	6·9383914	8	5·6952417	6·9220101
9	5·7087394	6·9445279	9	5·6971668	6·9284805	9	5·6854943	6·9121267
10	5·6995042	6·9345484	10	5·6879316	6·9185304	10	5·6762591	6·9022055
11	5·6906397	6·9244924	11	5·6790671	6·9085051	11	5·6673946	6·8922109
12	5·6820177	6·9143302	12	5·6704451	6·8983753	12	5·6587726	6·8821129
13	5·6735232	6·9040387	13	5·6619506	6·8881174	13	5·6502781	6·8718884
14	5·6650543	6·8936003	14	5·6534817	6·8777138	14	5·6418092	6·8615194
15	5·6565225	6·8830024	15	5·6449499	6·8671523	15	5·6332774	6·8509934
16	5·6478522	6·8722372	16	5·6362796	6·8564242	16	5·6246071	6·8403026
17	5·6389814	6·8613005	17	5·6274088	6·8455264	17	5·6157363	6·8294430
18	5·6298609	6·8501913	18	5·6182883	6·8344584	18	5·6066158	6·8184151
19	5·6204551	6·8389127	19	5·6088825	6·8232220	19	5·5972100	6·8072211
20	5·6107413	6·8274692	20	5·5991687	6·8118232	20	5·5874962	6·7958661
21	5·6007101	6·8158673	21	5·5891375	6·8002681	21	5·5774650	6·7843576
22	5·5905985	6·8041141	22	5·5790259	6·7885644	22	5·5673534	6·7727028
23	5·5804092	6·7922017	23	5·5688366	6·7767045	23	5·5571641	6·7608945
24	5·5701440	6·7801225	24	5·5585714	6·7646798	24	5·5468989	6·7489245
25	5·5598039	6·7678668	25	5·5482313	6·7524815	25	5·5365588	6·7367832
26	5·5493890	6·7554246	26	5·5378164	6·7400996	26	5·5261439	6·7244615
27	5·5388986	6·7427850	27	5·5273260	6·7275233	27	5·5156535	6·7119483
28	5·5283311	6·7299364	28	5·5167585	6·7147407	28	5·5050860	6·6992318
29	5·5176843	6·7168668	29	5·5061117	6·7017396	29	5·4944392	6·6862998
30	5·5069549	6·7035628	30	5·4953823	6·6885068	30	5·4837098	6·6731388
31	5·4961389	6·6900107	31	5·4845663	6·6750286	31	5·4728938	6·6597352
32	5·4852314	6·6761961	32	5·4736588	6·6612901	32	5·4619863	6·6460739
33	5·4742267	6·6621029	33	5·4626541	6·6472760	33	5·4509816	6·6321395
34	5·4631183	6·6477157	34	5·4515457	6·6329694	34	5·4398732	6·6179157
35	5·4518988	6·6330169	35	5·4403262	6·6183538	35	5·4286537	6·6033846
36	5·4405600	6·6179893	36	5·4289874	6·6034106	36	5·4173149	6·5885285
37	5·4290928	6·6026139	37	5·4175202	6·5881215	37	5·4058477	6·5733279
38	5·4174874	6·5868715	38	5·4059148	6·5724666	38	5·3942123	6·5577635
39	5·4057330	6·5707418	39	5·3941604	6·5564253	39	5·3824879	6·5418138
40	5·3938182	6·5542031	40	5·3822456	6·5399761	40	5·3705731	6·5254574
41	5·3817305	6·5372333	41	5·3701579	6·5230959	41	5·3584854	6·5086711
42	5·3694567	6·5198089	42	5·3578841	6·5057615	42	5·3462116	6·4914307
43	5·3569827	6·5019038	43	5·3454101	6·4879474	43	5·3337376	6·4737112
44	5·3442938	6·4834934	44	5·3327212	6·4696262	44	5·3210487	6·4554852
45	5·3313741	6·4645492	45	5·3198015	6·4507712	45	5·3081290	6·4367239
46	5·3182071	6·4450413	46	5·3066345	6·4313519	46	5·2949620	6·4173983
47	5·3047754	6·4249381	47	5·2932028	6·4113363	47	5·2815303	6·3974756
48	5·2910608	6·4042059	48	5·2794882	6·3906904	48	5·2678157	6·3769215
49	5·2770442	6·3828092	49	5·2654716	6·3693773	49	5·2537991	6·3556990
50	5·2627058	6·3607070	50	5·2511332	6·3473585	50	5·2394607	6·3337682
51	5·2480248	6·3378578	51	5·2364522	6·3245896	51	5·2247797	6·3110866
52	5·2327351	6·3142139	52	5·2211625	6·3010248	52	5·2094900	6·2876063
53	5·2170006	6·2897459	53	5·2054280	6·2766336	53	5·1937555	6·2632980
54	5·2008040	6·2644060	54	5·1892314	6·2513675	54	5·1775589	6·2381127

JOINT LIVES :—Male and Female Life.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	36		37			38		
Age of Male (x)	$\lambda\ D_{x,\,36}$	$\lambda\ N_{x,\,36}$	Age of Male (x)	$\lambda\ D_{x,\,37}$	$\lambda\ N_{x,\,37}$	Age of Male (x)	$\lambda\ D_{x,\,38}$	$\lambda\ N_{x,\,38}$
55	5·1841181	6·2381398	55	5·1725455	6·2251730	55	5·1608730	6·2119958
56	5·1669052	6·2108867	56	5·1553326	6·1979901	56	5·1436601	6·1848882
57	5·1491172	6·1825830	57	5·1375446	6·1697520	57	5·1258721	6·1567235
58	5·1306957	6·1531559	58	5·1191231	6·1403896	58	5·1074506	6·1274301
59	5·1115721	6·1225288	59	5·0999995	6·1098234	59	5·0883270	6·0969320
60	5·0916673	6·0906174	60	5·0800947	6·0779719	60	5·0684222	6·0651442
61	5·0708920	6·0573332	61	5·0593194	6·0447431	61	5·0476469	6·0319777
62	5·0491465	6·0225794	62	5·0375739	6·0100430	62	5·0259014	5·9973353
63	5·0263208	5·9862521	63	5·0147482	5·9737668	63	5·0030757	5·9611158
64	5·0022946	5·9482428	64	4·9907220	5·9358055	64	4·9790495	5·9232077
65	4·9769372	5·9084330	65	4·9653646	5·8960419	65	4·9536921	5·8834945
66	4·9501076	5·8666992	66	4·9385350	5·8543515	66	4·9268625	5·8418518
67	4·9216545	5·8229083	67	4·9100819	5·8106022	67	4·8984094	5·7981475
68	4·8914164	5·7769207	68	4·8798438	5·7646535	68	4·8681713	5·7522419
69	4·8592211	5·7285875	69	4·8476485	5·7163573	69	4·8359760	5·7039860
70	4·8248865	5·6777521	70	4·8133139	5·6655568	70	4·8016414	5·6532238
71	4·7882199	5·6242487	71	4·7766473	5·6120865	71	4·7649748	5·5997895
72	4·7490183	5·5679027	72	4·7374457	5·5557719	72	4·7257732	5·5435088
73	4·7070686	5·5085301	73	4·6954960	5·4964287	73	4·6838235	5·4841982
74	4·6621470	5·4459372	74	4·6505744	5·4338645	74	4·6389019	5·4216639
75	4·6140197	5·3799218	75	4·6024471	5·3678751	75	4·5907746	5·3557037
76	4·5624423	5·3102703	76	4·5508697	5·2982488	76	4·5391972	5·2861038
77	4·5071604	5·2367589	77	4·4955878	5·2247617	77	4·4839153	5·2126424
78	4·4479090	5·1591546	78	4·4363364	5·1471800	78	4·4246639	5·1350855
79	4·3844129	5·0772131	79	4·3728403	5·0652600	79	4·3611678	5·0531884
80	4·3163865	4·9906788	80	4·3048139	4·9787469	80	4·2931414	4·9666968
81	4·2435339	4·8992880	81	4·2319613	4·8873742	81	4·2202888	4·8753455
82	4·1655488	4·8027614	82	4·1539762	4·7908669	82	4·1423037	4·7788564
83	4·0821149	4·7008119	83	4·0705423	4·6889348	83	4·0588698	4·6769440
84	3·9929051	4·5931404	84	3·9813325	4·5812800	84	3·9696600	4·5693065
85	3·8975823	4·4794360	85	3·8860097	4·4675916	85	3·8743372	4·4556349
86	3·7957989	4·3593767	86	3·7842263	4·3475475	86	3·7725538	4·3356065
87	3·6871971	4·2326285	87	3·6756245	4·2208137	87	3·6639520	4·2088877
88	3·5714087	4·0988459	88	3·5598361	4·0870446	88	3·5481636	4·0751333
89	3·4480553	3·9576714	89	3·4364827	3·9458830	89	3·4248102	3·9339851
90	3·3167478	3·8087355	90	3·3051752	3·7969592	90	3·2935027	3·7850742
91	3·1770873	3·6516540	91	3·1655147	3·6398907	91	3·1538422	3·6280178
92	3·0286642	3·4860336	92	3·0170916	3·4742804	92	3·0054191	3·4624205
93	2·8710587	3·3114620	93	2·8594861	3·2997196	93	2·8478136	3·2878696
94	2·7038406	3·1275104	94	2·6922680	3·1157779	94	2·6805955	3·1039388
95	2·5265695	2·9337277	95	2·5149969	2·9220052	95	2·5033244	2·9101760
96	2·3387946	2·7296313	96	2·3272220	2·7179175	96	2·3155495	2·7060988
97	2·1400547	2·5146845	97	2·1284821	2·5029813	97	2·1168096	2·4911711
98	1·9298784	2·2882646	98	1·9183058	2·2765700	98	1·9066333	2·2647706
99	1·7077840	2·0495769	99	1·6962114	2·0378921	99	1·6845389	2·0261025
100	1·4732792	1·7974850	100	1·4617066	1·7858102	100	1·4500341	1·7740314
101	1·2258617	1·5301190	101	1·2142891	1·5184560	101	1·2026166	1·5066890
102	0·9650187	1·2439379	102	0·9534461	1·2322920	102	0·9417736	1·2205396
103	0·6902271	0·9312442	103	0·6786545	0·9196115	103	0·6669820	0·9078841
104	0·4009535	0·5721511	104	0·3893809	0·5605522	104	0·3777084	0·5488437
105	0·0966541		105	0·0850815		105	0·0734090	
106	9·7767749		106	9·7652023		106	9·7535298	
107	9·4407515		107	9·4291789		107	9·4175064	
108	9·0880092		108	9·0764366		108	9·0647641	
109	8·7179629		109	8·7063903		109	8·6947178	

ENGLISH LIFE TABLE, No. 3.

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	39			40			41	
Age of Male (x)	$\lambda\ D_{x,\,39}$	$\lambda\ N_{x,\,39}$	Age of Male (x)	$\lambda\ D_{x,\,40}$	$\lambda\ N_{x,\,40}$	Age of Male (x)	$\lambda\ D_{x,\,41}$	$\lambda\ N_{x,\,41}$
0	5·8899096	6·9985328	0	5·8780246	6·9815125	0	5·8660259	6·9641465
1	5·8059074	6·9804294	1	5·7940224	6·9633243	1	5·7820237	6·9458675
2	5·7706265	6·9674815	2	5·7587415	6·9503538	2	5·7467428	6·9328721
3	5·7485132	6·9560941	3	5·7366282	6·9389641	3	5·7246295	6·9214784
4	5·7316115	6·9454174	4	5·7197265	6·9282950	4	5·7077278	6·9108161
5	5·7173841	6·9351351	5	5·7054991	6·9180269	5	5·6935004	6·9005612
6	5·7050229	6·9250898	6	5·6931379	6·9080000	6	5·6811392	6·8905529
7	5·6938794	6·9151713	7	5·6819944	6·8981038	7	5·6699957	6·8806781
8	5·6834652	6·9053066	8	5·6715802	6·8882635	8	5·6595815	6·8708626
9	5·6737178	6·8954502	9	5·6618328	6·8784340	9	5·6498341	6·8610596
10	5·6644826	6·8855581	10	5·6525976	6·8685706	10	5·6405989	6·8512248
11	5·6556181	6·8755936	11	5·6437331	6·8586365	11	5·6317344	6·8413208
12	5·6469961	6·8655274	12	5·6351111	6·8486017	12	5·6231124	6·8313173
13	5·6385016	6·8553358	13	5·6266166	6·8384426	13	5·6146179	6·8211905
14	5·6300327	6·8450011	14	5·6181477	6·8281416	14	5·6061490	6·8109228
15	5·6215009	6·8345104	15	5·6096159	6·8176859	15	5·5976172	6·8005016
16	5·6128306	6·8238561	16	5·6009456	6·8070678	16	5·5889469	6·7899194
17	5·6039598	6·8130347	17	5·5920748	6·7962839	17	5·5800761	6·7791723
18	5·5948393	6·8020460	18	5·5829543	6·7853342	18	5·5709556	6·7682610
19	5·5854335	6·7908935	19	5·5735485	6·7742223	19	5·5615498	6·7571893
20	5·5757197	6·7795824	20	5·5638347	6·7629540	20	5·5518360	6·7459628
21	5·5656885	6·7681193	21	5·5538035	6·7515364	21	5·5418048	6·7345897
22	5·5555769	6·7565131	22	5·5436919	6·7399777	22	5·5316932	6·7230786
23	5·5453876	6·7447559	23	5·5335026	6·7282712	23	5·5215039	6·7114216
24	5·5351224	6·7328398	24	5·5232374	6·7164085	24	5·5112387	6·6996118
25	5·5247823	6·7207557	25	5·5128973	6·7043809	25	5·5008986	6·6876401
26	5·5143674	6·7084936	26	5·5024824	6·6921784	26	5·4904837	6·6754965
27	5·5038770	6·6960432	27	5·4919920	6·6797904	27	5·4799933	6·6631708
28	5·4933095	6·6833927	28	5·4814245	6·6672058	28	5·4694258	6·6506514
29	5·4826627	6·6705299	29	5·4707777	6·6544119	29	5·4587790	6·6379265
30	5·4719333	6·6574412	30	5·4600483	6·6413958	30	5·4480496	6·6249825
31	5·4611173	6·6441128	31	5·4492323	6·6281428	31	5·4372336	6·6118055
32	5·4502098	6·6305297	32	5·4383248	6·6146385	32	5·4263261	6·5983802
33	5·4392051	6·6166763	33	5·4273201	6·6008670	33	5·4153214	6·5846912
34	5·4280967	6·6025360	34	5·4162117	6·5868115	34	5·4042130	6·5707214
35	5·4168772	6·5880915	35	5·4049922	6·5724546	35	5·3929935	6·5564534
36	5·4055384	6·5733239	36	5·3936534	6·5577779	36	5·3816546	6·5418684
37	5·3940712	6·5582147	37	5·3821862	6·5427614	37	5·3701875	6·5269471
38	5·3824658	6·5427431	38	5·3705808	6·5273854	38	5·3585821	6·5116685
39	5·3707114	6·5268884	39	5·3588264	6·5116279	39	5·3468277	6·4960111
40	5·3587966	6·5106279	40	5·3469116	6·4954673	40	5·3349129	6·4799523
41	5·3467089	6·4939391	41	5·3348239	6·4788789	41	5·3228251	6·4634687
42	5·3344351	6·4767971	42	5·3225501	6·4618390	42	5·3105513	6·4465344
43	5·3219611	6·4591761	43	5·3100761	6·4443212	43	5·2980774	6·4291238
44	5·3092722	6·4410494	44	5·2973872	6·4262982	44	5·2853885	6·4112088
45	5·2963525	6·4223879	45	5·2844675	6·4077409	45	5·2724688	6·3927605
46	5·2831855	6·4031607	46	5·2713005	6·3886184	46	5·2593018	6·3737474
47	5·2697538	6·3833365	47	5·2578688	6·3688974	47	5·2458701	6·3541364
48	5·2560392	6·3628798	48	5·2441542	6·3485444	48	5·2321555	6·3338916
49	5·2420226	6·3417538	49	5·2301376	6·3275206	49	5·2181389	6·3129767
50	5·2276842	6·3199180	50	5·2157992	6·3057861	50	5·2038005	6·2913495
51	5·2130032	6·2973291	51	5·2011182	6·2832969	51	5·1891195	6·2689667
52	5·1977135	6·2739403	52	5·1858285	6·2600053	52	5·1738298	6·2457798
53	5·1819790	6·2497207	53	5·1700940	6·2358821	53	5·1580953	6·2217589
54	5·1657824	6·2246224	54	5·1538974	6·2108772	54	5·1418987	6·1968551

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	39			40			41	
Age of Male (x)	$\lambda\ D_{x,\,39}$	$\lambda\ N_{x,\,39}$	Age of Male (x)	$\lambda\ D_{x,\,40}$	$\lambda\ N_{x,\,40}$	Age of Male (x)	$\lambda\ D_{x,\,41}$	$\lambda\ N_{x,\,41}$
55	5·1490965	6·1985903	55	5·1372115	6·1849366	55	5·1252128	6·1710129
56	5·1318836	6·1715641	56	5·1199986	6·1579995	56	5·1079999	6·1441721
57	5·1140956	6·1434789	57	5·1022106	6·1299997	57	5·0902119	6·1162663
58	5·0956741	6·1142626	58	5·0837891	6·1008666	58	5·0717904	6·0872229
59	5·0765505	6·0838369	59	5·0646655	6·0705222	59	5·0526668	6·0569658
60	5·0566457	6·0521201	60	5·0447607	6·0388816	60	5·0327620	6·0254109
61	5·0358704	6·0190208	61	5·0239854	6·0058568	61	5·0119867	5·9924660
62	5·0141249	5·9844436	62	5·0022399	5·9713501	62	4·9902412	5·9580374
63	4·9912992	5·9482850	63	4·9794142	5·9352593	63	4·9674155	5·9220210
64	4·9672730	5·9104355	64	4·9553880	5·8974742	64	4·9433893	5·8843067
65	4·9419156	5·8707779	65	4·9300306	5·8578778	65	4·9180319	5·8447779
66	4·9150860	5·8291879	66	4·9032010	5·8163461	66	4·8912023	5·8033101
67	4·8866329	5·7855334	67	4·8747479	5·7727466	67	4·8627492	5·7597717
68	4·8563948	5·7396746	68	4·8445098	5·7269397	68	4·8325111	5·7140223
69	4·8241995	5·6914637	69	4·8123145	5·6787774	69	4·8003158	5·6659145
70	4·7898649	5·6407432	70	4·7779799	5·6281036	70	4·7659812	5·6152915
71	4·7531983	5·5873482	71	4·7413133	5·5747523	71	4·7293146	5·5619889
72	4·7139967	5·5311049	72	4·7021117	5·5185496	72	4·6901130	5·5058315
73	4·6720470	5·4718293	73	4·6601620	5·4593126	73	4·6481633	5·4466368
74	4·6271254	5·4093282	74	4·6152404	5·3968479	74	4·6032417	5·3842120
75	4·5789981	5·3433990	75	4·5671131	5·3309529	75	4·5551144	5·3183546
76	4·5274207	5·2738290	76	4·5155357	5·2614146	76	4·5035370	5·2488518
77	4·4721388	5·2003946	77	4·4602538	5·1880108	77	4·4482551	5·1754808
78	4·4128874	5·1228637	78	4·4010024	5·1105076	78	4·3890037	5·0980089
79	4·3493913	5·0409918	79	4·3375063	5·0286623	79	4·3255076	5·0161919
80	4·2813649	4·9545233	80	4·2694799	4·9422194	80	4·2574812	4·9297764
81	4·2085123	4·8631938	81	4·1966273	4·8509132	81	4·1846286	4·8384965
82	4·1305272	4·7667266	82	4·1186422	4·7544684	82	4·1066435	4·7420752
83	4·0470933	4·6648318	83	4·0352083	4·6525963	83	4·0232096	4·6402260
84	3·9578835	4·5572142	84	3·9459985	4·5449970	84	3·9339998	4·5326480
85	3·8625607	4·4435602	85	3·8506757	4·4313619	85	3·8386770	4·4190329
86	3·7607773	4·3235487	86	3·7488923	4·3113682	86	3·7368936	4·2990582
87	3·6521755	4·1968460	87	3·6402905	4·1846820	87	3·6282918	4·1723901
88	3·5363871	4·0631063	88	3·5245021	4·0509587	88	3·5125034	4·0386834
89	3·4130337	3·9219729	89	3·4011487	3·9098399	89	3·3891500	3·8975809
90	3·2817262	3·7730752	90	3·2698412	3·7609575	90	3·2578425	3·7487128
91	3·1420657	3·6160321	91	3·1301807	3·6039267	91	3·1181820	3·5916978
92	2·9936426	3·4504461	92	2·9817576	3·4383543	92	2·9697589	3·4261380
93	2·8360371	3·2759077	93	2·8241521	3·2638280	93	2·8121534	3·2516251
94	2·6688190	3·0919875	94	2·6569340	3·0799200	94	2·6449353	3·0677295
95	2·4915479	2·8982358	95	2·4796629	2·8861787	95	2·4676642	2·8740003
96	2·3037730	2·6941681	96	2·2918880	2·6821225	96	2·2798893	2·6699544
97	2·1050331	2·4792513	97	2·0931481	2·4672158	97	2·0811494	2·4550596
98	1·8948568	2·2528610	98	1·8829718	2·2408367	98	1·8709731	2·2286913
99	1·6727624	2·0142037	99	1·6608774	2·0021904	99	1·6488787	1·9900572
100	1·4382576	1·7621435	100	1·4263726	1·7501426	100	1·4143739	1·7380215
101	1·1908401	1·4948153	101	1·1789551	1·4828264	101	1·1669564	1·4707206
102	0·9299971	1·2086805	102	0·9181121	1·1967094	102	0·9061134	1·1846205
103	0·6552055	0·8960409	103	0·6433205	0·8840927	103	0·6313218	0·8720222
104	0·3659319	0·5370379	104	0·3540469	0·5251096	104	0·3420482	0·5130710
105	0·0616325		105	0·0497475		105	0·0377488	
106	9·7417533		106	9·7298683		106	9·7178696	
107	9·4057299		107	9·3938449		107	9·3818462	
108	9·0529876		108	9·0411026		108	9·0291039	
109	8·6829413		109	8·6710563		109	8·6590576	

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Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	42			43			44	
Age of Male (x)	λ $D_{x,\,42}$	λ $N_{x,\,42}$	Age of Male (x)	λ $D_{x,\,43}$	λ $N_{x,\,43}$	Age of Male (x)	λ $D_{x,\,44}$	λ $N_{x,\,44}$
0	5·8539080	6·9464160	0	5·8416649	6·9283003	0	5·8292902	6·9097766
1	5·7699058	6·9280395	1	5·7576627	6·9098188	1	5·7452880	6·8911830
2	5·7346249	6·9150161	2	5·7223818	6·8967647	2	5·7100071	6·8780945
3	5·7125116	6·9036170	3	5·7002685	6·8853585	3	5·6878938	6·8666793
4	5·6956099	6·8929605	4	5·6833668	6·8747067	4	5·6709921	6·8560309
5	5·6813825	6·8827185	5	5·6691394	6·8644768	5	5·6567647	6·8458123
6	5·6690213	6·8727279	6	5·6567782	6·8545036	6	5·6444035	6·8358561
7	5·6578778	6·8628747	7	5·6456347	6·8446716	7	5·6332600	6·8260452
8	5·6474636	6·8530834	8	5·6352205	6·8349044	8	5·6228458	6·8163020
9	5·6377162	6·8433072	9	5·6254731	6·8251546	9	5·6130984	6·8065785
10	5·6284810	6·8335005	10	5·6162379	6·8153763	10	5·6038632	6·7968282
11	5·6196165	6·8236264	11	5·6073734	6·8055316	11	5·5949987	6·7870135
12	5·6109945	6·8136540	12	5·5987514	6·7955903	12	5·5863767	6·7771026
13	5·6025000	6·8035594	13	5·5902569	6·7855278	13	5·5778822	6·7670718
14	5·5940311	6·7933248	14	5·5817880	6·7753260	14	5·5694133	6·7569027
15	5·5854993	6·7829376	15	5·5732562	6·7649724	15	5·5608815	6·7465825
16	5·5768290	6·7723904	16	5·5645859	6·7544598	16	5·5522112	6·7361041
17	5·5679582	6·7616800	17	5·5557151	6·7437851	17	5·5433404	6·7254645
18	5·5588377	6·7508065	18	5·5465946	6·7329490	18	5·5342199	6·7146650
19	5·5494319	6·7397743	19	5·5371888	6·7219555	19	5·5248141	6·7037098
20	5·5397181	6·7285893	20	5·5274750	6·7108112	20	5·5151003	6·6926054
21	5·5296869	6·7172596	21	5·5174438	6·6995246	21	5·5050691	6·6813608
22	5·5195753	6·7057948	22	5·5073322	6·6881050	22	5·4949575	6·6699861
23	5·5093860	6·6941875	23	5·4971429	6·6765461	23	5·4847682	6·6584743
24	5·4991208	6·6824293	24	5·4868777	6·6648397	24	5·4745030	6·6468184
25	5·4887807	6·6705128	25	5·4765376	6·6529771	25	5·4641629	6·6350098
26	5·4783658	6·6584276	26	5·4661227	6·6409497	26	5·4537480	6·6230387
27	5·4678754	6·6461636	27	5·4556323	6·6287465	27	5·4432576	6·6108960
28	5·4573079	6·6337094	28	5·4450648	6·6163569	28	5·4326901	6·5985699
29	5·4466611	6·6210526	29	5·4344180	6·6037683	29	5·4220433	6·5860487
30	5·4359317	6·6081808	30	5·4236886	6·5909677	30	5·4113139	6·5733194
31	5·4251157	6·5950794	31	5·4128726	6·5779418	31	5·4004979	6·5603682
32	5·4142082	6·5817336	32	5·4019651	6·5646752	32	5·3895904	6·5471806
33	5·4032035	6·5681272	33	5·3909604	6·5511521	33	5·3785857	6·5337401
34	5·3920951	6·5542439	34	5·3798520	6·5373553	34	5·3674773	6·5200307
35	5·3808756	6·5400656	35	5·3686325	6·5232674	35	5·3562578	6·5060333
36	5·3695368	6·5255737	36	5·3572937	6·5088697	36	5·3449190	6·4917303
37	5·3580696	6·5107484	37	5·3458265	6·4941420	37	5·3331518	6·4771012
38	5·3464642	6·4955696	38	5·3342211	6·4790636	38	5·3218164	6·4621251
39	5·3347098	6·4800144	39	5·3224667	6·4636131	39	5·3100920	6·4467799
40	5·3227950	6·4640606	40	5·3105519	6·4477664	40	5·2981772	6·4310427
41	5·3107073	6·4476838	41	5·2984642	6·4314994	41	5·2860895	6·4148884
42	5·2984335	6·4308592	42	5·2861904	6·4147870	42	5·2738157	6·3982912
43	5·2859595	6·4135594	43	5·2737164	6·3976023	43	5·2613417	6·3812238
44	5·2732706	6·3957570	44	5·2610275	6·3799162	44	5·2486528	6·3636586
45	5·2603509	6·3774219	45	5·2481078	6·3616994	45	5·2357331	6·3455638
46	5·2471839	6·3585232	46	5·2349408	6·3429195	46	5·2225661	6·3269079
47	5·2337522	6·3390270	47	5·2215091	6·3235433	47	5·2091344	6·3076567
48	5·2200376	6·3188977	48	5·2077945	6·3035347	48	5·1954198	6·2877739
49	5·2060210	6·2980966	49	5·1937779	6·2828547	49	5·1814032	6·2672208
50	5·1916826	6·2765838	50	5·1794395	6·2614615	50	5·1670648	6·2459546
51	5·1770016	6·2543138	51	5·1647585	6·2393115	51	5·1523838	6·2239302
52	5·1617119	6·2312386	52	5·1494688	6·2163549	52	5·1370941	6·2010999
53	5·1459774	6·2073278	53	5·1337343	6·1925616	53	5·1213596	6·1774311
54	5·1297808	6·1825320	54	5·1175377	6·1678816	54	5·1051630	6·1528746

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	42		43			44		
Age of Male (x)	$\lambda\ D_{x,\,42}$	$\lambda\ N_{x,\,42}$	Age of Male (x)	$\lambda\ D_{x,\,43}$	$\lambda\ N_{x,\,43}$	Age of Male (x)	$\lambda\ D_{x,\,44}$	$\lambda\ N_{x,\,44}$
55	5·1130949	6·1567959	55	5·1008518	6·1422589	55	5·0884771	6·1273740
56	5·0958820	6·1300586	56	5·0836389	6·1156335	56	5·0712642	6·1008676
57	5·0780940	6·1022539	57	5·0658509	6·0879379	57	5·0534762	6·0732897
58	5·0596725	6·0733095	58	5·0474294	6·0590997	58	5·0350547	6·0445665
59	5·0405489	6·0431469	59	5·0283058	6·0290411	59	5·0159311	6·0146196
60	5·0206441	6·0116834	60	5·0084010	5·9976773	60	4·9960263	5·9833650
61	4·9998688	5·9788283	61	4·9876257	5·9649189	61	4·9752510	5·9507120
62	4·9781233	5·9444849	62	4·9658802	5·9306688	62	4·9535055	5·9165636
63	4·9552976	5·9085499	63	4·9430545	5·8948237	63	4·9306798	5·8808168
64	4·9312714	5·8709138	64	4·9190283	5·8572734	64	4·9066536	5·8433610
65	4·9059140	5·8314594	65	4·8936709	5·8179013	65	4·8812962	5·8040791
66	4·8790844	5·7900626	66	4·8668413	5·7765828	66	4·8544666	5·7628470
67	4·8506313	5·7465913	67	4·8383882	5·7331859	67	4·8260135	5·7195328
68	4·8203932	5·7009061	68	4·8081501	5·6875712	68	4·7957754	5·6739964
69	4·7881979	5·6528584	69	4·7759548	5·6395908	69	4·7635801	5·6260902
70	4·7538633	5·6022923	70	4·7416202	5·5890880	70	4·7292455	5·5756582
71	4·7171967	5·5490427	71	4·7049536	5·5358982	71	4·6925789	5·5225349
72	4·6779951	5·4929364	72	4·6657520	5·4798474	72	4·6533773	5·4665470
73	4·6360454	5·4337890	73	4·6238023	5·4207534	73	4·6114276	5·4075114
74	4·5911238	5·3714082	74	4·5788807	5·3584224	74	4·5665060	5·3452365
75	4·5429965	5·3055923	75	4·5307534	5·2926523	75	4·5183787	5·2795187
76	4·4914191	5·2361287	76	4·4791760	5·2232321	76	4·4668013	5·2101465
77	4·4361372	5·1627943	77	4·4238941	5·1499387	77	4·4115194	5·1368983
78	4·3768858	5·0853567	78	4·3646427	5·0725389	78	4·3522680	5·0595416
79	4·3133897	5·0035722	79	4·3011466	4·9907898	79	4·2887719	4·9778319
80	4·2453633	4·9171856	80	4·2331202	4·9044369	80	4·2207455	4·8915163
81	4·1725107	4·8259335	81	4·1602676	4·8132152	81	4·1478929	4·8003293
82	4·0945256	4·7295389	82	4·0822825	4·7168494	82	4·0699078	4·7039951
83	4·0110917	4·6277140	83	3·9988486	4·6150511	83	3·9864739	4·6022271
84	3·9218819	4·5201594	84	3·9096388	4·5075224	84	3·8972641	4·4947260
85	3·8265591	4·4065660	85	3·8143160	4·3939525	85	3·8019413	4·3811824
86	3·7247757	4·2866114	86	3·7125326	4·2740204	86	3·7001579	4·2612743
87	3·6161739	4·1599628	87	3·6039308	4·1473918	87	3·5915561	4·1346692
88	3·5003855	4·0262742	88	3·4881424	4·0137231	88	3·4757677	4·0010207
89	3·3770321	3·8851887	89	3·3647890	3·8726556	89	3·3524143	3·8599736
90	3·2457246	3·7363367	90	3·2334815	3·7238209	90	3·2211068	3·7111574
91	3·1060641	3·5793365	91	3·0938210	3·5668368	91	3·0814463	3·5541910
92	2·9576410	3·4137916	92	2·9453979	3·4013077	92	2·9330232	3·3886784
93	2·8000355	3·2392920	93	2·7877924	3·2268228	93	2·7754177	3·2142089
94	2·6328174	3·0554097	94	2·6205743	3·0429538	94	2·6081996	3·0303552
95	2·4555463	2·8616933	95	2·4433032	2·8492511	95	2·4309285	2·8366658
96	2·2677714	2·6576600	96	2·2555283	2·6452306	96	2·2431536	2·6326597
97	2·0690315	2·4427760	97	2·0567884	2·4303589	97	2·0444137	2·4178020
98	1·8588552	2·2164197	98	1·8466121	2·2040144	98	1·8342374	2·1914703
99	1·6367608	1·9777972	99	1·6245177	1·9654054	99	1·6121430	1·9528728
100	1·4022560	1·7257761	100	1·3900129	1·7133973	100	1·3776382	1·7008811
101	1·1548385	1·4584898	101	1·1425954	1·4461285	101	1·1302207	1·4336274
102	0·8939955	1·1724074	102	0·8817524	1·1600662	102	0·8693777	1·1475867
103	0·6192039	0·8598345	103	0·6069608	0·8475171	103	0·5945861	0·8350688
104	0·3299303	0·5009085	104	0·3176872	0·4886212	104	0·3053125	0·4762083
105	0·0256309		105	0·0133878		105	0·0010131	
106	9·7057517		106	9·6935086		106	9·6811339	
107	9·3697283		107	9·3574852		107	9·3451105	
108	9·0169860		108	9·0047429		108	8·9923682	
109	8·6469397		109	8·6346966		109	8·6223219	

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	45		46			47		
Age of Male (x)	$\lambda\ D_{x,\,45}$	$\lambda\ N_{x,\,45}$	Age of Male (x)	$\lambda\ D_{x,\,46}$	$\lambda\ N_{x,\,46}$	Age of Male (x)	$\lambda\ D_{x,\,47}$	$\lambda\ N_{x,\,47}$
0	5·8167768	6·8908208	0	5·8041175	6·8714062	0	5·7913043	6·8515043
1	5·7327746	6·8721063	1	5·7201153	6·8525621	1	5·7073021	6·8325201
2	5·6974937	6·8589804	2	5·6848344	6·8393944	2	5·6720212	6·8193070
3	5·6753804	6·8475539	3	5·6627211	6·8279550	3	5·6499079	6·8078516
4	5·6584787	6·8369079	4	5·6458194	6·8173094	4	5·6330062	6·7972058
5	5·6442513	6·8266998	5	5·6315920	6·8071111	5	5·6187788	6·7870157
6	5·6318901	6·8167600	6	5·6192308	6·7971871	6	5·6064176	6·7771071
7	5·6207466	6·8069696	7	5·6080873	6·7874171	7	5·5952741	6·7673568
8	5·6103324	6·7972502	8	5·5976731	6·7777212	8	5·5848599	6·7576842
9	5·6005850	6·7875529	9	5·5879257	6·7680500	9	5·5751125	6·7480392
10	5·5913498	6·7778310	10	5·5786905	6·7583562	10	5·5658773	6·7383735
11	5·5824853	6·7680456	11	5·5698260	6·7486005	11	5·5570128	6·7286471
12	5·5738033	6·7581656	12	5·5612040	6·7387510	12	5·5483908	6·7188283
13	5·5653688	6·7481661	13	5·5527095	6·7287830	13	5·5398963	6·7088915
14	5·5568999	6·7380292	14	5·5442406	6·7186779	14	5·5314274	6·6988185
15	5·5483681	6·7277423	15	5·5357088	6·7084238	15	5·5228956	6·6885963
16	5·5396978	6·7172976	16	5·5270385	6·6980126	16	5·5142253	6·6782183
17	5·5308270	6·7066928	17	5·5181677	6·6874420	17	5·5053545	6·6676816
18	5·5217065	6·6959291	18	5·5090472	6·6767134	18	5·4962340	6·6569877
19	5·5123007	6·6850110	19	5·4996414	6·6658321	19	5·4868282	6·6461421
20	5·5025869	6·6739462	20	5·4899276	6·6548054	20	5·4771144	6·6351529
21	5·4925557	6·6627430	21	5·4798964	6·6436430	21	5·4670832	6·6240300
22	5·4824441	6·6514120	22	5·4697848	6·6323550	22	5·4569716	6·6127844
23	5·4722548	6·6399469	23	5·4595955	6·6209355	23	5·4467823	6·6014097
24	5·4619896	6·6283402	24	5·4493303	6·6093776	24	5·4365171	6·5898991
25	5·4516495	6·6165842	25	5·4389902	6·5976729	25	5·4261770	6·5782453
26	5·4412346	6·6046696	26	5·4285753	6·5858131	26	5·4157621	6·5664391
27	5·4307442	6·5925856	27	5·4180849	6·5737880	27	5·4052717	6·5544712
28	5·4201767	6·5803225	28	5·4075174	6·5615865	28	5·3947042	6·5423311
29	5·4095299	6·5678680	29	5·3968706	6·5491976	29	5·3840574	6·5300067
30	5·3988005	6·5552092	30	5·3861412	6·5366085	30	5·3733280	6·5174862
31	5·3879845	6·5423325	31	5·3753252	6·5238054	31	5·3625120	6·5047558
32	5·3770770	6·5292228	32	5·3644177	6·5107737	32	5·3516045	6·4918011
33	5·3660723	6·5158651	33	5·3534130	6·4974976	33	5·3405998	6·4786067
34	5·3549639	6·5022421	34	5·3423046	6·4839611	34	5·3294914	6·4651554
35	5·3437444	6·4883364	35	5·3310851	6·4701458	35	5·3182719	6·4514305
36	5·3324056	6·4741279	36	5·3197463	6·4560332	36	5·3069331	6·4374126
37	5·3209384	6·4595982	37	5·3082791	6·4416025	37	5·2954659	6·4230822
38	5·3093330	6·4447252	38	5·2966737	6·4268335	38	5·2838605	6·4084171
39	5·2975786	6·4294871	39	5·2849193	6·4117037	39	5·2721061	6·3933958
40	5·2856638	6·4138605	40	5·2730045	6·3961891	40	5·2601913	6·3779947
41	5·2735761	6·3978208	41	5·2609168	6·3802653	41	5·2481036	6·3621883
42	5·2613023	6·3813417	42	5·2486430	6·3639063	42	5·2358298	6·3459506
43	5·2488283	6·3643953	43	5·2361690	6·3470837	43	5·2233558	6·3292541
44	5·2361394	6·3469530	44	5·2234801	6·3297682	44	5·2106669	6·3120681
45	5·2232197	6·3289850	45	5·2105604	6·3119290	45	5·1977472	6·2943619
46	5·2100527	6·3104571	46	5·1973934	6·2935343	46	5·1845802	6·2761025
47	5·1966210	6·2913359	47	5·1839617	6·2745474	47	5·1711485	6·2572551
48	5·1829064	6·2715845	48	5·1702471	6·2549324	48	5·1574339	6·2377809
49	5·1688898	6·2511633	49	5·1562305	6·2346492	49	5·1434173	6·2176408
50	5·1545514	6·2300306	50	5·1418921	6·2136548	50	5·1290789	6·1967911
51	5·1398704	6·2081394	51	5·1272111	6·1919038	51	5·1143979	6·1751856
52	5·1245807	6·1854411	52	5·1119214	6·1693452	52	5·0991082	6·1527737
53	5·1088462	6·1619050	53	5·0961869	6·1459481	53	5·0833737	6·1295236
54	5·0926496	6·1374794	54	5·0799903	6·1216619	54	5·0671771	6·1053834

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Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of **Female** (y)	45			46			47	
Age of **Male** (x)	$\lambda\ D_{x,\,45}$	$\lambda\ N_{x,\,45}$	**Age** of **Male** (x)	$\lambda\ D_{x,\,46}$	$\lambda\ N_{x,\,46}$	**Age** of **Male** (x)	$\lambda\ D_{x,\,47}$	$N_{x,\,47}$
55	5·0759637	6·1121088	55	5·0633044	6·0964289	55	5·0504912	6·0802970
56	5·0587508	6·0857311	56	5·0460915	6·0701879	56	5·0332783	6·0542008
57	5·0409628	6·0582783	57	5·0283035	6·0428704	57	5·0154903	6·0270270
58	5·0225413	6·0296788	58	5·0098820	6·0144029	58	4·9970688	5·9987016
59	5·0034177	5·9998532	59	4·9907584	5·9847074	59	4·9779452	5·9691452
60	4·9835129	5·9637162	60	4·9708536	5·9536976	60	4·9580404	5·9382724
61	4·9627376	5·9361777	61	4·9500783	5·9212831	61	4·9372651	5·9059915
62	4·9409921	5·9021403	62	4·9283328	5·8873663	62	4·9155196	5·8722050
63	4·9181664	5·8665005	63	4·9055071	5·8518434	63	4·8926939	5·8368089
64	4·8941402	5·8291483	64	4·8814809	5·8146037	64	4·8686677	5·7996924
65	4·8687828	5·7899659	65	4·8561235	5·7755305	65	4·8433103	5·7607375
66	4·8419532	5·7488289	66	4·8292939	5·7344983	66	4·8164807	5·7198202
67	4·8135001	5·7056058	67	4·8008408	5·6913752	67	4·7880276	5·6768076
68	4·7832620	5·6601562	68	4·7706027	5·6460216	68	4·7577895	5·6315595
69	4·7510667	5·6123325	69	4·7384074	5·5982895	69	4·7255942	5·5839287
70	4·7167321	5·5619787	70	4·7040728	5·5480229	70	4·6912596	5·5337586
71	4·6800655	5·5089300	71	4·6674062	5·4950567	71	4·6545930	5·4808846
72	4·6408639	5·4530123	72	4·6282046	5·4392177	72	4·6153914	5·4251327
73	4·5989142	5·3940429	73	4·5862549	5·3803223	73	4·5734417	5·3663207
74	4·5539926	5·3318294	74	4·5413333	5·3181790	74	4·5285201	5·3042554
75	4·5058653	5·2661710	75	4·4932060	5·2525854	75	4·4803928	5·2387362
76	4·4542879	5·1968537	76	4·4416286	5·1833308	76	4·4288154	5·1695505
77	4·3990060	5·1236564	77	4·3863467	5·1091916	77	4·3735335	5·0964777
78	4·3397546	5·0463473	78	4·3270953	5·0329361	78	4·3142821	5·0192838
79	4·2762585	4·9646829	79	4·2635992	4·9513219	79	4·2507860	4·9377270
80	4·2082321	4·8784086	80	4·1955728	4·8650956	80	4·1827596	4·8515543
81	4·1353795	4·7872607	81	4·1227202	4·7739918	81	4·1099070	4·7605009
82	4·0573944	4·6909629	82	4·0447351	4·6777 47	82	4·0319219	4·6642912
83	3·9739605	4·5892280	83	3·9613012	4·5760383	83	3·9484880	4·5626380
84	3·8847507	4·4817584	84	3·8720914	4·4686040	84	3·8592782	4·4552444
85	3·7894279	4·3682438	85	3·7767686	4·3551225	85	3·7639554	4·3418002
86	3·6876445	4·2483630	86	3·6749852	4·2352721	86	3·6621720	4·2219851
87	3·5790427	4·1217824	87	3·5663834	4·1087202	87	3·5535702	4·0954658
88	3·4632543	3·9831584	88	3·4505950	3·9751220	88	3·4377818	3·9618979
89	3·3399009	3·8471326	89	3·3272416	3·8341217	89	3·3144284	3·8209243
90	3·2085934	3·6983372	90	3·1959341	3·6853485	90	3·1831209	3·6721782
91	3·0689329	3·5413895	91	3·0562736	3·5284218	91	3·0434604	3·5152763
92	2·9205098	3·3758953	92	2·9078505	3·3629476	92	2·8950373	3·3498232
93	2·7629043	3·2014424	93	2·7502450	3·1885139	93	2·7374318	3·1754109
94	2·5956862	3·0176047	94	2·5830269	3·0046933	94	2·5702137	2·9916102
95	2·4184151	2·8239312	95	2·4057558	2·8110365	95	2·3929426	2·7979714
96	2·2306402	2·6199391	96	2·2179809	2·6070602	96	2·2051677	2·5940134
97	2·0319003	2·4050952	97	2·0192410	2·3922326	97	2·0064278	2·3792021
98	1·8217240	2·1787776	98	1·8090647	2·1659292	98	1·7962515	2·1529167
99	1·5996296	1·9401961	99	1·5869703	1·9273632	99	1·5741571	1·9143664
100	1·3651248	1·6882160	100	1·3524655	1·6754016	100	1·3396523	1·6624226
101	1·1177073	1·4209833	101	1·1050480	1·4081806	101	1·0922348	1·3952250
102	0·8568643	1·1349608	102	0·8442050	1·1221864	102	0·8313918	1·1092444
103	0·5820727	0·8224688	103	0·5694134	0·8097213	103	0·5566002	0·7968171
104	0·2927991	0·4636541	104	0·2801398	0·4509416	104	0·2673266	0·4380833
105	9·9884997		105	9·9758404		105	9·9630272	
106	9·6686205		106	9·6559612		106	9·6431480	
107	9·3325971		107	9·3199378		107	9·3071246	
108	8·9798548		108	8·9671955		108	8·9543823	
109	8·6098085		109	8·5971492		109	8·5843360	

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Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	48			49			50	
Age of Male (x)	$\lambda\ D_{x,\,48}$	$\lambda\ N_{x,\,48}$	Age of Male (x)	$\lambda\ D_{x,\,49}$	$\lambda\ N_{x,\,49}$	Age of Male (x)	$\lambda\ D_{x,\,50}$	$\lambda\ N_{x,\,50}$
0	5·7783289	6·8310831	0	5·7651824	6·8101075	0	5·7518557	6·7885391
1	5·6943267	6·8119483	1	5·6811802	6·7908106	1	5·6678535	6·7690665
2	5·6590458	6·7986845	2	5·6458993	6·7774912	2	5·6325726	6·7556870
3	5·6369325	6·7872112	3	5·6237860	6·7659966	3	5·6104593	6·7441680
4	5·6200308	6·7765627	4	5·6068843	6·7553442	4	5·5935576	6·7335091
5	5·6058034	6·7663805	5	5·5926569	6·7451680	5	5·5793302	6·7233383
6	5·5934422	6·7564860	6	5·5802957	6·7352876	6	5·5669690	6·7134704
7	5·5822987	6·7467554	7	5·5691522	6·7255756	7	5·5558255	6·7037773
8	5·5718845	6·7371057	8	5·5587380	6·7159491	8	5·5454113	6·6941729
9	5·5621371	6·7274866	9	5·5489906	6·7063556	9	5·5356639	6·6846053
10	5·5529019	6·7178490	10	5·5397554	6·6967459	10	5·5264287	6·6750233
11	5·5440374	6·7081523	11	5·5308909	6·6870788	11	5·5175642	6·6653857
12	5·5354154	6·6983638	12	5·5222689	6·6773210	12	5·5089422	6·6556584
13	5·5269209	6·6884585	13	5·5137744	6·6674464	13	5·5004477	6·6458151
14	5·5184520	6·6784170	14	5·5053055	6·6574368	14	5·4919788	6·6358367
15	5·5099202	6·6682272	15	5·4967737	6·6472786	15	5·4834470	6·6257104
16	5·5012499	6·6578813	16	5·4881034	6·6369653	16	5·4747767	6·6154288
17	5·4923791	6·6473779	17	5·4792326	6·6264941	17	5·4659059	6·6049902
18	5·4832586	6·6367182	18	5·4701121	6·6158681	18	5·4567854	6·5943966
19	5·4738528	6·6259079	19	5·4607063	6·6050924	19	5·4473796	6·5836549
20	5·4641390	6·6149553	20	5·4509925	6·5941758	20	5·4376658	6·5727734
21	5·4541078	6·6038710	21	5·4409613	6·5831291	21	5·4276346	6·5617638
22	5·4439962	6·5926665	22	5·4308197	6·5719646	22	5·4175230	6·5506384
23	5·4338069	6·5813358	23	5·4206604	6·5606768	23	5·4073337	6·5393920
24	5·4235417	6·5698720	24	5·4103952	6·5492588	24	5·3970685	6·5280184
25	5·4132016	6·5582675	25	5·4000551	6·5377028	25	5·3867284	6·5165101
26	5·4027867	6·5465141	26	5·3896402	6·5260010	26	5·3763135	6·5048588
27	5·3922963	6·5346023	27	5·3791498	6·5141442	27	5·3658231	6·4930557
28	5·3817288	6·5225220	28	5·3685823	6·5021222	28	5·3552556	6·4810912
29	5·3710820	6·5102615	29	5·3579355	6·4899243	29	5·3446088	6·4689539
30	5·3603526	6·4978082	30	5·3472061	6·4775378	30	5·3338794	6·4566326
31	5·3495366	6·4851496	31	5·3363901	6·4649492	31	5·3230634	6·4441137
32	5·3386291	6·4722709	32	5·3254826	6·4521456	32	5·3121559	6·4313832
33	5·3276244	6·4591567	33	5·3144779	6·4391105	33	5·3011512	6·4184268
34	5·3165160	6·4457908	34	5·3033695	6·4258287	34	5·2900428	6·4052275
35	5·3052965	6·4321552	35	5·2921500	6·4122822	35	5·2788233	6·3917688
36	5·2939577	6·4182320	36	5·2808112	6·3984524	36	5·2674845	6·3780320
37	5·2824905	6·4040005	37	5·2693140	6·3843199	37	5·2560173	6·3639970
38	5·2708851	6·3894402	38	5·2577386	6·3698631	38	5·2444119	6·3496437
39	5·2591307	6·3745279	39	5·2459842	6·3550601	39	5·2326575	6·3349491
40	5·2472159	6·3592404	40	5·2340694	6·3398867	40	5·2207427	6·3198901
41	5·2351282	6·3435527	41	5·2219817	6·3243178	41	5·2086550	6·3044405
42	5·2228544	6·3274380	42	5·2097079	6·3083275	42	5·1963812	6·2885743
43	5·2103804	6·3108685	43	5·1972339	6·2918868	43	5·1839072	6·2722636
44	5·1976915	6·2938147	44	5·1845150	6·2749661	44	5·1712183	6·2554778
45	5·1847718	6·2762444	45	5·1716253	6·2575341	45	5·1582986	6·2381852
46	5·1716048	6·2581242	46	5·1584583	6·2395562	46	5·1451316	6·2203521
47	5·1581731	6·2394186	47	5·1450266	6·2209967	47	5·1316999	6·2019415
48	5·1444585	6·2200906	48	5·1313120	6·2018173	48	5·1179853	6·1829152
49	5·1304419	6·2000984	49	5·1172954	6·1819779	49	5·1039687	6·1632314
50	5·1161035	6·1793987	50	5·1029570	6·1614333	50	5·0896303	6·1428470
51	5·1014225	6·1579449	51	5·0882760	6·1401367	51	5·0749493	6·1217124
52	5·0861328	6·1356856	52	5·0729863	6·1180364	52	5·0596596	6·0997773
53	5·0703983	6·1125896	53	5·0572518	6·0951007	53	5·0439251	6·0770080
54	5·0542017	6·0886038	54	5·0410552	6·0712766	54	5·0277285	6·0533521

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of **Female** (*y*)	48			49			50	
Age of **Male** (*x*)	λ $D_{x,\,48}$	λ $N_{x,\,48}$	**Age** of **Male** (*x*)	λ $D_{x,\,49}$	λ $N_{x,\,49}$	**Age** of **Male** (*x*)	λ $D_{x,\,50}$	λ $N_{x,\,50}$
55	5·0375158	6·0636708	55	5·0243693	6·0465057	55	5·0110426	6·0287506
56	5·0203029	6·0377285	56	5·0071564	6·0207247	56	4·9938297	6·0031395
57	5·0025149	6·0107070	57	4·9893684	5·9938645	57	4·9760417	5·9764490
58	4·9840934	5·9825326	58	4·9709469	5·9658501	58	4·9576202	5·9486038
59	4·9649698	5·9531251	59	4·9518233	5·9366014	59	4·9384966	5·9195227
60	4·9450650	5·9223988	60	4·9319185	5·9060314	60	4·9185918	5·8891190
61	4·9242897	5·8902619	61	4·9111432	5·8740483	61	4·8978165	5·8573000
62	4·9025442	5·8566159	62	4·8893977	5·8405536	62	4·8760710	5·8239666
63	4·8797185	5·8213569	63	4·8665720	5·8054420	63	4·8532453	5·7890136
64	4·8556923	5·7843738	64	4·8425458	5·7686028	64	4·8292191	5·7523292
65	4·8303349	5·7455483	65	4·8171884	5·7299176	65	4·8038617	5·7137949
66	4·8035053	5·7047557	66	4·7903588	5·6892610	66	4·7770321	5·6732853
67	4·7750522	5·6618639	67	4·7619057	5·6465003	67	4·7485790	5·6306674
68	4·7448141	5·6167322	68	4·7316676	5·6014958	68	4·7183409	5·5858006
69	4·7126188	5·5692127	69	4·6994723	5·5540988	69	4·6861456	5·5385371
70	4·6782842	5·5191494	70	4·6651377	5·5041527	70	4·6518110	5·4887199
71	4·6416176	5·4663771	71	4·6284711	5·4514931	71	4·6151444	5·4361837
72	4·6024160	5·4107226	72	4·5892695	5·3959460	72	4·5759428	5·3807554
73	4·5604663	5·3520028	73	4·5473198	5·3373291	73	4·5339931	5·3222519
74	4·5155447	5·2900259	74	4·5023982	5·2754498	74	4·4890715	5·2604812
75	4·4674174	5·2245896	75	4·4542709	5·2101068	75	4·4409442	5·1952414
76	4·4158400	5·1554827	76	4·4026935	5·1410881	76	4·3893668	5·1263214
77	4·3605581	5·0824831	77	4·3474116	5·0681726	77	4·3340849	5·0534996
78	4·3013067	5·0053598	78	4·2881602	4·9911273	78	4·2748335	4·9765434
79	4·2378106	4·9238686	79	4·2246641	4·9097116	79	4·2113374	4·8952109
80	4·1697842	4·8377569	80	4·1566377	4·8236698	80	4·1433110	4·8092499
81	4·0969316	4·7467610	81	4·0837851	4·7327394	81	4·0704584	4·7183945
82	4·0189465	4·6506057	82	4·0058000	4·6366453	82	3·9924733	4·6223709
83	3·9355126	4·5490027	83	3·9223661	4·5351010	83	3·9090394	4·5208933
84	3·8463028	4·4416557	84	3·8331563	4·4278081	84	3·8198296	4·4136630
85	3·7509800	4·3282552	85	3·7378335	4·3144582	85	3·7245068	4·3003716
86	3·6491966	4·2084801	86	3·6360501	4·1947302	86	3·6227234	4·1806989
87	3·5405948	4·0819986	87	3·5274483	4·0682920	87	3·5141216	4·0543119
88	3·4248064	3·9484658	88	3·4116599	3·9348003	88	3·3983332	3·9208675
89	3·3014530	3·8075249	89	3·2883065	3·7938979	89	3·2749798	3·7800104
90	3·1701455	3·6588077	90	3·1569990	3·6452159	90	3·1436723	3·6313707
91	3·0304850	3·5019338	91	3·0173385	3·4883745	91	3·0040118	3·4745674
92	2·8820619	3·3365076	92	2·8689154	3·3229780	92	2·8555887	3·3092082
93	2·7244564	3·1621182	93	2·7113099	3·1486184	93	2·6979832	3·1348815
94	2·5572383	2·9783408	94	2·5440918	2·9648661	94	2·5307651	2·9511626
95	2·3799672	2·7847235	95	2·3668207	2·7712743	95	2·3534940	2·7575995
96	2·1921923	2·5807848	96	2·1790458	2·5673605	96	2·1657191	2·5537144
97	1·9934524	2·3659944	97	1·9803059	2·3525918	97	1·9669792	2·3389736
98	1·7832761	2·1397286	98	1·7701296	2·1263490	98	1·7568029	2·1127578
99	1·5611817	1·9011972	99	1·5480352	1·8878423	99	1·5347085	1·8742794
100	1·3266769	1·6492716	100	1·3135304	1·6359399	100	1·3002037	1·6224088
101	1·0792594	1·3820963	101	1·0661129	1·3687851	101	1·0527862	1·3552867
102	0·8184164	1·0961450	102	0·8052699	1·0828643	102	0·7919432	1·0693907
103	0·5436248	0·7837321	103	0·5304783	0·7704912	103	0·5171516	0·7570618
104	0·2543512	0·4250449	104	0·2412047	0·4118217	104	0·2278780	0·3984435
105	9·9500518		105	9·9369053		105	9·9235786	
106	9·6301726		106	9·6170261		106	9·6036994	
107	9·2941492		107	9·2810027		107	9·2676760	
108	8·9414069		108	8·9282604		108	8·9149337	
109	8·5713606		109	8·5582141		109	8·5448874	

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of Female (y)	51			52			53	
Age of Male (x)	$\lambda\ D_{x,51}$	$\lambda\ N_{x,51}$	Age of Male (x)	$\lambda\ D_{x,52}$	$\lambda\ N_{x,52}$	Age of Male (x)	$\lambda\ D_{x,53}$	$\lambda\ N_{x,53}$
0	5·7383389	6·7663347	0	5·7246218	6·7434458	0	5·7106937	6·7198174
1	5·6543367	6·7466727	1	5·6406196	6·7235793	1	5·6266915	6·6997305
2	5·6190558	6·7332264	2	5·6053387	6·7100606	2	5·5914106	6·6861326
3	5·5969425	6·7216805	3	5·5832254	6·6984832	3	5·5692973	6·6745211
4	5·5800408	6·7110131	4	5·5663237	6·6878059	4	5·5523956	6·6638306
5	5·5658134	6·7008457	5	5·5520963	6·6776404	5	5·5381682	6·6536662
6	5·5534522	6·6909901	6	5·5397351	6·6677956	6	5·5258070	6·6438311
7	5·5423087	6·6813145	7	5·5285916	6·6581376	7	5·5146635	6·6341895
8	5·5318945	6·6717326	8	5·5181774	6·6485771	8	5·5042493	6·6246507
9	5·5221471	6·6621901	9	5·5084300	6·6390604	9	5·4945019	6·6151587
10	5·5129119	6·6526363	10	5·4991948	6·6295337	10	5·4852667	6·6056603
11	5·5040474	6·6430278	11	5·4903303	6·6199550	11	5·4764022	6·5961105
12	5·4954254	6·6333309	12	5·4817083	6·6102884	12	5·4677802	6·5864745
13	5·4869309	6·6235189	13	5·4732138	6·6005074	13	5·4592857	6·5767241
14	5·4784620	6·6135718	14	5·4647449	6·5905917	14	5·4508168	6·5668394
15	5·4699302	6·6034769	15	5·4562131	6·5805278	15	5·4422850	6·5568070
16	5·4612599	6·5932271	16	5·4475428	6·5703091	16	5·4336147	6·5466190
17	5·4523891	6·5828200	17	5·4386720	6·5599337	17	5·4247439	6·5362743
18	5·4432686	6·5722588	18	5·4295515	6·5494040	18	5·4156234	6·5257759
19	5·4338628	6·5615497	19	5·4201457	6·5387274	19	5·4062176	6·5151307
20	5·4241490	6·5507029	20	5·4104319	6·5279136	20	5·3965038	6·5043496
21	5·4141178	6·5397292	21	5·4004007	6·5169752	21	5·3864726	6·4934451
22	5·4040062	6·5286421	22	5·3902891	6·5059255	22	5·3763610	6·4824316
23	5·3938169	6·5174363	23	5·3800998	6·4947594	23	5·3661717	6·4713042
24	5·3835517	6·5061059	24	5·3698346	6·4834709	24	5·3559065	6·4600570
25	5·3732116	6·4946439	25	5·3594945	6·4720537	25	5·3455664	6·4486832
26	5·3627967	6·4830421	26	5·3490796	6·4605001	26	5·3351515	6·4371761
27	5·3523063	6·4712915	27	5·3385892	6·4488011	27	5·3246611	6·4255271
28	5·3417388	6·4593830	28	5·3280217	6·4369470	28	5·3140936	6·4137265
29	5·3310920	6·4473056	29	5·3173749	6·4249278	29	5·3034468	6·4017640
30	5·3203626	6·4350474	30	5·3066455	6·4127322	30	5·2927174	6·3896289
31	5·3095466	6·4225966	31	5·2958295	6·4003472	31	5·2819014	6·3773088
32	5·2986391	6·4099385	32	5·2849220	6·3877599	32	5·2709939	6·3647903
33	5·2876344	6·3970585	33	5·2739173	6·3749554	33	5·2599892	6·3520594
34	5·2765260	6·3839412	34	5·2628089	6·3619177	34	5·2488808	6·3391003
35	5·2653065	6·3705686	35	5·2515894	6·3486306	35	5·2376613	6·3258962
36	5·2539677	6·3569235	36	5·2402506	6·3350752	36	5·2263225	6·3124298
37	5·2425005	6·3429858	37	5·2287834	6·3212332	37	5·2148553	6·2986814
38	5·2308951	6·3287343	38	5·2171780	6·3070830	38	5·2032499	6·2846310
39	5·2191407	6·3141477	39	5·2054236	6·2926027	39	5·1914955	6·2702562
40	5·2072259	6·2992016	40	5·1935088	6·2777696	40	5·1795807	6·2555340
41	5·1951382	6·2838717	41	5·1814211	6·2625579	41	5·1674930	6·2404399
42	5·1828644	6·2681304	42	5·1691473	6·2469412	42	5·1552192	6·2249467
43	5·1703904	6·2519495	43	5·1566733	6·2308907	43	5·1427452	6·2090263
44	5·1577015	6·2352996	44	5·1439844	6·2143765	44	5·1300563	6·1926480
45	5·1447818	6·2181480	45	5·1310647	6·1973669	45	5·1171366	6·1757800
46	5·1316148	6·2004606	46	5·1178977	6·1798269	46	5·1039696	6·1583885
47	5·1181831	6·1822017	47	5·1044660	6·1617201	47	5·0905379	6·1404354
48	5·1044685	6·1633311	48	5·0907514	6·1430082	48	5·0768233	6·1218821
49	5·0904519	6·1438074	49	5·0767348	6·1236472	49	5·0628067	6·1026872
50	5·0761135	6·1235861	50	5·0623964	6·1035931	50	5·0484683	6·0828027
51	5·0614325	6·1026192	51	5·0477154	6·0827969	51	5·0337873	6·0621806
52	5·0461428	6·0808534	52	5·0324257	6·0612059	52	5·0184976	6·0407681
53	5·0304083	6·0582571	53	5·0166912	6·0387870	53	5·0027631	6·0185317
54	5·0142117	6·0347756	54	5·0004946	6·0154863	54	4·9865665	5·9954169

JOINT LIVES:—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	51		52			53		
Age of Male (x)	$\lambda\ D_{x,\,51}$	$\lambda\ N_{x,\,51}$	Age of Male (x)	$\lambda\ D_{x,\,52}$	$\lambda\ N_{x,\,52}$	Age of Male (x)	$\lambda\ D_{x,\,53}$	$\lambda\ N_{x,\,53}$
55	4·9975258	6·0103505	55	4·9838087	5·9912441	55	4·9698806	5·9713632
56	4·9803129	5·9849169	56	4·9665958	5·9659950	56	4·9526677	5·9463050
57	4·9625249	5·9584042	57	4·9488078	5·9396679	57	4·9348797	5·9201706
58	4·9441034	5·9307367	58	4·9303863	5·9121864	58	4·9164582	5·8928828
59	4·9249798	5·9018328	59	4·9112627	5·8834683	59	4·8973346	5·8643589
60	4·9050750	5·8716050	60	4·8913579	5·8534256	60	4·8774298	5·8345098
61	4·8842997	5·8399599	61	4·8705826	5·8219642	61	4·8566545	5·8032414
62	4·8625542	5·8067981	62	4·8488371	5·7889842	62	4·8349090	5·7704527
63	4·8397285	5·7720141	63	4·8260114	5·7543794	63	4·8120833	5·7360372
64	4·8157023	5·7354956	64	4·8019852	5·7180372	64	4·7880571	5·6998815
65	4·7903449	5·6971234	65	4·7766278	5·6798382	65	4·7626997	5·6618658
66	4·7635153	5·6567719	66	4·7497982	5·6396557	66	4·7358701	5·6218634
67	4·7350622	5·6143079	67	4·7213451	5·5973568	67	4·7074170	5·5797400
68	4·7048241	5·5695907	68	4·6911070	5·5528002	68	4·6771789	5·5353549
69	4·6726288	5·5224714	69	4·6589117	5·5058372	69	4·6449836	5·4885587
70	4·6382942	5·4727942	70	4·6245771	5·4563104	70	4·6106490	5·4391942
71	4·6016276	5·4203932	71	4·5879105	5·4040556	71	4·5739824	5·3870955
72	4·5624260	5·3650941	72	4·5487089	5·3488981	72	4·5347808	5·3320898
73	4·5204763	5·3067156	73	4·5067592	5·2906544	73	4·4928311	5·2739934
74	4·4755547	5·2450641	74	4·4618376	5·2291339	74	4·4479095	5·2126129
75	4·4274274	5·1799388	75	4·4137103	5·1641336	75	4·3997822	5·1477486
76	4·3758500	5·1111280	76	4·3621329	5·0954428	76	4·3482048	5·0791877
77	4·3205681	5·0384103	77	4·3068510	5·0228399	77	4·2929229	5·0067095
78	4·2613167	4·9615535	78	4·2475996	4·9460930	78	4·2336715	4·9300821
79	4·1978206	4·8803156	79	4·1841035	4·8649594	79	4·1701754	4·8490636
80	4·1297942	4·7944434	80	4·1160771	4·7791873	80	4·1021490	4·7634003
81	4·0569416	4·7036739	81	4·0432245	4·6885124	81	4·0292964	4·6728300
82	3·9789565	4·6077308	82	3·9652394	4·5926598	82	3·9513113	4·5770771
83	3·8955226	4·5063286	83	3·8818055	4·4913438	83	3·8678774	4·4758559
84	3·8063128	4·3991707	84	3·7925957	4·3842665	84	3·7786676	4·3688694
85	3·7109900	4·2859472	85	3·6972729	4·2711207	85	3·6833448	4·2558088
86	3·6092066	4·1663378	86	3·5954895	4·1515846	86	3·5815614	4·1363552
87	3·5006048	4·0400114	87	3·4868877	4·0253263	87	3·4729596	4·0101757
88	3·3848164	3·9066232	88	3·3710993	3·8920049	88	3·3571712	3·8769264
89	3·2614630	3·7658183	89	3·2477459	3·7512614	89	3·2338178	3·7362546
90	3·1301555	3·6172290	90	3·1164384	3·6027294	90	3·1025103	3·5877895
91	2·9904950	3·4604727	91	2·9767779	3·4460288	91	2·9628498	3·4311520
92	2·8420719	3·2951564	92	2·8283548	3·2807650	92	2·8144267	3·2659483
93	2·6844664	3·1208712	93	2·6707493	3·1065289	93	2·6568212	3·0917700
94	2·5172483	2·9371898	94	2·5035312	2·9228946	94	2·4896031	2·9081905
95	2·3399772	2·7436649	95	2·3262601	2·7294127	95	2·3123320	2·7147621
96	2·1522023	2·5398135	96	2·1384852	2·5256058	96	2·1245571	2·5110045
97	1·9534624	2·3251064	97	1·9397453	2·3109396	97	1·9258172	2·2963901
98	1·7432861	2·0989247	98	1·7295690	2·0847985	98	1·7156409	2·0702991
99	1·5211917	1·8604799	99	1·5074746	1·8463971	99	1·4935465	1·8319484
100	1·2866869	1·6086469	100	1·2729698	1·5946091	100	1·2590417	1·5802177
101	1·0392694	1·3415690	101	1·0255523	1·3275837	101	1·0116242	1·3132554
102	0·7784264	1·0557223	102	0·7647093	1·0418031	102	0·7507812	1·0275535
103	0·5036348	0·7434235	103	0·4899177	0·7295859	103	0·4759896	0·7154434
104	0·2143612	0·3848729	104	0·2006441	0·3710679	104	0·1867160	0·3570768
105	9·9100618		105	9·8963447		105	9·8824166	
106	9·5901826		106	9·5764655		106	9·5625374	
107	9·2541592		107	9·2404421		107	9·2265140	
108	8·9014169		108	8·8876998		108	8·8737717	
109	8·5313706		109	8·5176535		109	8·5037254	

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	54			55			56	
Age of Male (x)	λ $D_{x,\,54}$	λ $N_{x,\,54}$	Age of Male (x)	λ $D_{x,\,55}$	λ $N_{x,\,55}$	Age of Male (x)	λ $D_{x,\,56}$	λ $N_{x,\,56}$
0	5·6965436	6·6953855	0	5·6814965	6·6700675	0	5·6658698	6·6438497
1	5·6125414	6·6750619	1	5·5974943	6·6494991	1	5·5818676	6·6230214
2	5·5772605	6·6613792	2	5·5622134	6·6357266	2	5·5465867	6·6091535
3	5·5551472	6·6497297	3	5·5401001	6·6240367	3	5·5244734	6·5974190
4	5·5382455	6·6390243	4	5·5231984	6·6133145	4	5·5075717	6·5866779
5	5·5240181	6·6288587	5	5·5089710	6·6031470	5	5·4933443	6·5765065
6	5·5116569	6·6190334	6	5·4966098	6·5933294	6	5·4809831	6·5666962
7	5·5005134	6·6094075	7	5·4854663	6·5837196	7	5·4698396	6·5571006
8	5·4900992	6·5998895	8	5·4750521	6·5742218	8	5·4594254	6·5476239
9	5·4803518	6·5904225	9	5·4653047	6·5647794	9	5·4496780	6·5382057
10	5·4711166	6·5809513	10	5·4560695	6·5553361	10	5·4404428	6·5287896
11	5·4622521	6·5714314	11	5·4472050	6·5458450	11	5·4315783	6·5193282
12	5·4536301	6·5618252	12	5·4385830	6·5362699	12	5·4229563	6·5097830
13	5·4451356	6·5521065	13	5·4300885	6·5265806	13	5·4144618	6·5001251
14	5·4366667	6·5422520	14	5·4216196	6·5167578	14	5·4059929	6·4903322
15	5·4281349	6·5322501	15	5·4130878	6·5067861	15	5·3974611	6·4803910
16	5·4194646	6·5220930	16	5·4044175	6·4966589	16	5·3887908	6·4702935
17	5·4105938	6·5117785	17	5·3955467	6·4863745	17	5·3799200	6·4600383
18	5·4014733	6·5013105	18	5·3864262	6·4759362	18	5·3707995	6·4496295
19	5·3920675	6·4906963	19	5·3770204	6·4653519	19	5·3613937	6·4390746
20	5·3823537	6·4799466	20	5·3673066	6·4546333	20	5·3516799	6·4283858
21	5·3723225	6·4690754	21	5·3572754	6·4437938	21	5·3416487	6·4175776
22	5·3622109	6·4580970	22	5·3471638	6·4328496	22	5·3315371	6·4066662
23	5·3520216	6·4470069	23	5·3369745	6·4217957	23	5·3213478	6·3956475
24	5·3417564	6·4357998	24	5·3267093	6·4106269	24	5·3110826	6·3845163
25	5·3314163	6·4244687	25	5·3163692	6·3993374	25	5·3007425	6·3732665
26	5·3210014	6·4130065	26	5·3059543	6·3879195	26	5·2903276	6·3618915
27	5·3105110	6·4014059	27	5·2954639	6·3763652	27	5·2798372	6·3503830
28	5·2999435	6·3896572	28	5·2848964	6·3646667	28	5·2692697	6·3387327
29	5·2892967	6·3777503	29	5·2742496	6·3528136	29	5·2586229	6·3269318
30	5·2785673	6·3656740	30	5·2635202	6·3407950	30	5·2478935	6·3149688
31	5·2677513	6·3534169	31	5·2527042	6·3285987	31	5·2370775	6·3028327
32	5·2568438	6·3409657	32	5·2417967	6·3162131	32	5·2261700	6·2905101
33	5·2458391	6·3283064	33	5·2307920	6·3036237	33	5·2151653	6·2779886
34	5·2347307	6·3154237	34	5·2196836	6·2908154	34	5·2040569	6·2652533
35	5·2235112	6·3023015	35	5·2084641	6·2777724	35	5·1928374	6·2522875
36	5·2121724	6·2889214	36	5·1971253	6·2644774	36	5·1814986	6·2390751
37	5·2007052	6·2752655	37	5·1856581	6·2509111	37	5·1700314	6·2255971
38	5·1890998	6·2613126	38	5·1740527	6·2370544	38	5·1584260	6·2118339
39	5·1773454	6·2470419	39	5·1622983	6·2228850	39	5·1466716	6·1977646
40	5·1654306	6·2324294	40	5·1503835	6·2083806	40	5·1347568	6·1833658
41	5·1533429	6·2174508	41	5·1382958	6·1935162	41	5·1226691	6·1686139
42	5·1410691	6·2020802	42	5·1260220	6·1782657	42	5·1103953	6·1534823
43	5·1285951	6·1862883	43	5·1135480	6·1626015	43	5·0979213	6·1379435
44	5·1159062	6·1700457	44	5·1008591	6·1464924	44	5·0852324	6·1219674
45	5·1029865	6·1533193	45	5·0879394	6·1299074	45	5·0723127	6·1055214
46	5·0898195	6·1360753	46	5·0747724	6·1128107	46	5·0591457	6·0885720
47	5·0763878	6·1182773	47	5·0613407	6·0951659	47	5·0457140	6·0710811
48	5·0626732	6·0998843	48	5·0476261	6·0769342	48	5·0319994	6·0530093
49	5·0486566	6·0808544	49	5·0336095	6·0580714	49	5·0179828	6·0343143
50	5·0343182	6·0611429	50	5·0192711	6·0385316	50	5·0036444	6·0149487
51	5·0196372	6·0406977	51	5·0045901	6·0182661	51	4·9889634	5·9948626
52	5·0043475	6·0194666	52	4·9893004	5·9972184	52	4·9736737	5·9740014
53	4·9886130	5·9974161	53	4·9735659	5·9753569	53	4·9579392	5·9523318
54	4·9724164	5·9744916	54	4·9573693	5·9526258	54	4·9417426	5·9297979

JOINT LIVES:—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	54		55			56		
Age of Male (x)	λ $D_{x,\,54}$	λ $N_{x,\,54}$	Age of Male (x)	λ $D_{x,\,55}$	λ $N_{x,\,55}$	Age of Male (x)	λ $D_{x,\,56}$	λ $N_{x,\,56}$
55	4·9557305	5·9506317	55	4·9406834	5·9289640	55	4·9250567	5·9063380
56	4·9385176	5·9257702	56	4·9234705	5·9043040	56	4·9078438	5·8818846
57	4·9207296	5·8998347	57	4·9056825	5·8785729	57	4·8900558	5·8563637
58	4·9023081	5·8727477	58	4·8872610	5·8516922	58	4·8716343	5·8296961
59	4·8831845	5·8444251	59	4·8681374	5·8235779	59	4·8525107	5·8017967
60	4·8632797	5·8147780	60	4·8482326	5·7941395	60	4·8326059	5·7725750
61	4·8425044	5·7837107	61	4·8274573	5·7632812	61	4·8118306	5·7419336
62	4·8207589	5·7511223	62	4·8057118	5·7309007	62	4·7900851	5·7097704
63	4·7979332	5·7169052	63	4·7828861	5·6968904	63	4·7672594	5·6759760
64	4·7739070	5·6809457	64	4·7588599	5·6611355	64	4·7432332	5·6404355
65	4·7485496	5·6431231	65	4·7335025	5·6235148	65	4·7178758	5·6030271
66	4·7217200	5·6033103	66	4·7066729	5·5839008	66	4·6910462	5·5636222
67	4·6932669	5·5613732	67	4·6782198	5·5421583	67	4·6625931	5·5220853
68	4·6630288	5·5171694	68	4·6479817	5·4981454	68	4·6323550	5·4782736
69	4·6308335	5·4705500	69	4·6157864	5·4517115	69	4·6001597	5·4320371
70	4·5964989	5·4213574	70	4·5814518	5·4026998	70	4·5658251	5·3832169
71	4·5598323	5·3694262	71	4·5447852	5·3509437	71	4·5291585	5·3316475
72	4·5206307	5·3145811	72	4·5055836	5·2962691	72	4·4899569	5·2771536
73	4·4786810	5·2566408	73	4·4636339	5·2384920	73	4·4480072	5·2195517
74	4·4337594	5·1954116	74	4·4187123	5·1774214	74	4·4030856	5·1586492
75	4·3856321	5·1306913	75	4·3705850	5·1128539	75	4·3549583	5·0942451
76	4·3340547	5·0622702	76	4·3190076	5·0445783	76	4·3033809	5·0261261
77	4·2787728	4·9899253	77	4·2637257	4·9723736	77	4·2480990	4·9540712
78	4·2195214	4·9134260	78	4·2044743	4·8960084	78	4·1888476	4·8778498
79	4·1560253	4·8325300	79	4·1409782	4·8152402	79	4·1253515	4·7972191
80	4·0879989	4·7469843	80	4·0729518	4·7298174	80	4·0573251	4·7119270
81	4·0151463	4·6565256	81	4·0000992	4·6394755	81	3·9844725	4·6217110
82	3·9371612	4·5608800	82	3·9221141	4·5439407	82	3·9064874	4·5262954
83	3·8537273	4·4597611	83	3·8386802	4·4429273	83	3·8230535	4·4253959
84	3·7645175	4·3528720	84	3·7494704	4·3361390	84	3·7338437	4·3187151
85	3·6691947	4·2399048	85	3·6541476	4·2232669	85	3·6385209	4·2059461
86	3·5674113	4·1205387	86	3·5523642	4·1039921	86	3·5367375	4·0867684
87	3·4588095	3·9944443	87	3·4437624	3·9779823	87	3·4281357	3·9608517
88	3·3430211	3·8612763	88	3·3279740	3·8448964	88	3·3123473	3·8278518
89	3·2196677	3·7206793	89	3·2046206	3·7043779	89	3·1889939	3·6874166
90	3·0883602	3·5722883	90	3·0733131	3·5560576	90	3·0576864	3·5391765
91	2·9486997	3·4157204	91	2·9336526	3·3995604	91	2·9180259	3·3827524
92	2·8002766	3·2505832	92	2·7852295	3·2344892	92	2·7696028	3·2177518
93	2·6426711	3·0764683	93	2·6276240	3·0604372	93	2·6119973	3·0437669
94	2·4754530	2·8929501	94	2·4604059	2·8769783	94	2·4447792	2·8603727
95	2·2981819	2·6995811	95	2·2831348	2·6836665	95	2·2675081	2·6671213
96	2·1104070	2·4958814	96	2·0953599	2·4800227	96	2·0797332	2·4635377
97	1·9116671	2·2813221	97	1·8966200	2·2655176	97	1·8809933	2·2490905
98	1·7014908	2·0552889	98	1·6864437	2·0395383	98	1·6708170	2·0231690
99	1·4793964	1·8169972	99	1·4643193	1·8013042	99	1·4487226	1·7849937
100	1·2448916	1·5653282	100	1·2298445	1·5496959	100	1·2142178	1·5334530
101	0·9974741	1·2984404	101	0·9824270	1·2828757	101	0·9668003	1·2667044
102	0·7366311	1·0128246	102	0·7215840	0·9973471	102	0·7059573	0·9812658
103	0·4618395	0·7008335	103	0·4467924	0·6854551	103	0·4311657	0·6694842
104	0·1725659	0·3426398	104	0·1575188	0·3273998	104	0·1418921	0·3115843
105	9·8682665		105	9·8532194		105	9·8375927	
106	9·5483873		106	9·5333402		106	9·5177135	
107	9·2123639		107	9·1973168		107	9·1816901	
108	8·8596216		108	8·8445745		108	8·8289478	
109	8·4895753		109	8·4745282		109	8·4589015	

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	57			58			59	
Age of Male (x)	$\lambda\ D_{x,\,57}$	$\lambda\ N_{x,\,57}$	Age of Male (x)	$\lambda\ D_{x,\,58}$	$\lambda\ N_{x,\,58}$	Age of Male (x)	$\lambda\ D_{x,\,59}$	$\lambda\ N_{x,\,59}$
0	5·6496376	6·6166794	0	5·6327629	6·5884978	0	5·6151980	6·5592397
1	5·5656354	6·5955752	1	5·5487607	6·5671006	1	5·5311958	6·5375316
2	5·5303545	6·5816048	2	5·5134798	6·5530204	2	5·4959149	6·5233340
3	5·5082412	6·5698225	3	5·4913665	6·5411857	3	5·4738016	6·5114421
4	5·4913395	6·5590591	4	5·4744648	6·5303979	4	5·4568999	6·5006268
5	5·4771121	6·5488825	5	5·4602374	6·5202134	5	5·4426725	6·4904329
6	5·4647509	6·5390780	6	5·4478762	6·5104139	6	5·4303113	6·4806360
7	5·4536074	6·5294966	7	5·4367327	6·5008455	7	5·4191678	6·4710803
8	5·4431932	6·5200392	8	5·4263185	6·4914075	8	5·4087536	6·4616608
9	5·4334458	6·5106459	9	5·4165711	6·4820378	9	5·3990062	6·4523148
10	5·4242106	6·5012569	10	5·4073359	6·4726767	10	5·3897710	6·4429807
11	5·4153461	6·4918248	11	5·3984714	6·4632737	11	5·3809065	6·4336077
12	5·4067241	6·4823104	12	5·3898494	6·4537897	12	5·3722845	6·4241541
13	5·3982296	6·4726828	13	5·3813549	6·4441935	13	5·3637900	6·4145886
14	5·3897607	6·4629211	14	5·3728860	6·4344619	14	5·3553211	6·4048882
15	5·3812289	6·4530095	15	5·3643542	6·4245810	15	5·3467893	6·3950369
16	5·3725586	6·4429418	16	5·3556839	6·4145418	16	5·3381190	6·3850275
17	5·3636878	6·4327154	17	5·3468131	6·4043444	17	5·3292482	6·3748578
18	5·3545673	6·4223349	18	5·3376926	6·3939920	18	5·3201277	6·3645331
19	5·3451615	6·4118089	19	5·3282868	6·3834936	19	5·3107219	6·3540621
20	5·3354477	6·4011494	20	5·3185730	6·3728627	20	5·3010081	6·3434587
21	5·3254165	6·3903714	21	5·3085418	6·3621144	21	5·2909769	6·3327390
22	5·3153049	6·3794922	22	5·2984302	6·3512661	22	5·2808653	6·3219213
23	5·3051156	6·3685074	23	5·2882409	6·3403146	23	5·2706760	6·3110013
24	5·2948504	6·3574124	24	5·2779757	6·3292547	24	5·2604108	6·2999758
25	5·2845103	6·3462015	25	5·2676356	6·3180811	25	5·2500707	6·2888383
26	5·2740954	6·3348676	26	5·2572207	6·3067876	26	5·2396558	6·2775833
27	5·2636050	6·3234037	27	5·2467303	6·2953660	27	5·2291654	6·2662040
28	5·2530375	6·3118006	28	5·2361628	6·2838094	28	5·2185979	6·2546912
29	5·2423907	6·3000497	29	5·2255160	6·2721075	29	5·2079511	6·2430372
30	5·2316613	6·2881412	30	5·2147866	6·2602508	30	5·1972217	6·2312312
31	5·2208453	6·2760630	31	5·2039706	6·2482289	31	5·1864057	6·2192633
32	5·2099378	6·2638027	32	5·1930631	6·2360289	32	5·1754982	6·2071217
33	5·1989331	6·2513469	33	5·1820584	6·2236377	33	5·1644935	6·1947932
34	5·1878247	6·2386820	34	5·1709500	6·2110412	34	5·1533851	6·1822637
35	5·1766052	6·2257921	35	5·1597305	6·1982245	35	5·1421656	6·1695181
36	5·1652664	6·2126600	36	5·1483917	6·1851712	36	5·1308268	6·1565410
37	5·1537992	6·1992683	37	5·1369245	6·1718631	37	5·1193596	6·1433143
38	5·1421938	6·1855966	38	5·1253191	6·1582811	38	5·1077542	6·1298197
39	5·1304394	6·1716247	39	5·1135647	6·1444046	39	5·0959998	6·1160363
40	5·1185246	6·1573301	40	5·1016499	6·1302112	40	5·0840850	6·1019422
41	5·1064369	6·1426882	41	5·0895622	6·1156778	41	5·0719973	6·0875142
42	5·0941631	6·1276739	42	5·0772884	6·1007781	42	5·0597235	6·0727273
43	5·0816891	6·1122588	43	5·0648144	6·0854851	43	5·0472495	6·0575539
44	5·0690002	6·0964136	44	5·0521255	6·0697688	44	5·0345606	6·0419649
45	5·0560805	6·0801061	45	5·0392058	6·0535979	45	5·0216409	6·0259282
46	5·0429135	6·0633019	46	5·0260388	6·0369377	46	5·0084739	6·0094105
47	5·0294818	6·0459641	47	5·0126071	6·0197517	47	4·9950422	5·9923747
48	5·0157672	6·0280528	48	4·9988925	6·0020001	48	4·9813276	5·9747811
49	5·0017506	6·0095249	49	4·9848759	5·9836392	49	4·9673110	5·9565864
50	4·9874122	5·9903339	50	4·9705375	5·9646227	50	4·9529726	5·9377441
51	4·9727312	5·9704293	51	4·9558565	5·9448999	51	4·9382916	5·9182030
52	4·9574415	5·9497556	52	4·9405668	5·9244154	52	4·9230019	5·8979077
53	4·9417070	5·9282804	53	4·9248323	5·9031358	53	4·9072674	5·8768255
54	4·9255104	5·9059468	54	4·9086357	5·8810051	54	4·8910708	5·8548993

JOINT LIVES :—Male and Female Life.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	57			58			59	
Age of Male (x)	λ $D_{x,\,57}$	λ $N_{x,\,57}$	Age of Male (x)	λ $D_{x,\,58}$	λ $N_{x,\,58}$	Age of Male (x)	λ $D_{x,\,59}$	λ $N_{x,\,59}$
55	4·9088245	5·8826928	55	4·8919498	5·8579602	55	4·8743849	5·8320661
56	4·8916116	5·8584501	56	4·8747369	5·8339322	56	4·8571720	5·8082564
57	4·8738236	5·8331445	57	4·8569489	5·8088466	57	4·8393840	5·7833948
58	4·8554021	5·8066960	58	4·8385274	5·7826227	58	4·8209625	5·7574001
59	4·8362785	5·7790186	59	4·8194038	5·7551735	59	4·8018389	5·7301849
60	4·8163737	5·7500206	60	4·7994990	5·7264066	60	4·7819341	5·7016556
61	4·7955984	5·7196047	61	4·7787237	5·6962236	61	4·7611588	5·6717130
62	4·7738529	5·6876671	62	4·7569782	5·6645203	62	4·7394133	5·6402517
63	4·7510272	5·6540984	63	4·7341525	5·6311858	63	4·7165876	5·6071606
64	4·7270010	5·6187821	64	4·7101263	5·5961037	64	4·6925614	5·5723217
65	4·7016436	5·5815960	65	4·6847689	5·5591502	65	4·6672040	5·5356110
66	4·6748140	5·5424109	66	4·6579393	5·5201956	66	4·6403744	5·4968976
67	4·6463609	5·5010906	67	4·6294862	5·4791030	67	4·6119213	5·4560436
68	4·6161228	5·4574918	68	4·5992481	5·4357286	68	4·5816832	5·4129048
69	4·5839275	5·4114634	69	4·5670528	5·3899204	69	4·5494879	5·3673288
70	4·5495929	5·3628470	70	4·5327182	5·3415194	70	4·5151533	5·3191554
71	4·5129263	5·3114757	71	4·4960516	5·2903584	71	4·4784867	5·2682167
72	4·4737247	5·2571744	72	4·4568500	5·2362616	72	4·4392851	5·2143372
73	4·4317750	5·1997590	73	4·4149003	5·1790451	73	4·3973354	5·1573319
74	4·3868534	5·1390370	74	4·3699787	5·1185155	74	4·3524138	5·0970077
75	4·3387261	5·0748059	75	4·3218514	5·0544706	75	4·3042865	5·0331611
76	4·2871487	5·0068553	76	4·2702740	4·9866983	76	4·2527091	4·9655808
77	4·2318668	4·9349618	77	4·2149921	4·9149780	77	4·1974272	4·8940445
78	4·1726154	4·8588943	78	4·1557407	4·8390769	78	4·1381758	4·8183216
79	4·1091193	4·7784117	79	4·0922446	4·7587530	79	4·0746797	4·7381691
80	4·0410929	4·6932608	80	4·0242182	4·6737542	80	4·0066533	4·6533341
81	3·9682403	4·6031795	81	3·9513656	4·5838178	81	3·9338007	4·5635536
82	3·8902552	4·5078926	82	3·8733805	4·4886695	82	3·8558156	4·4685548
83	3·8068213	4·4071152	83	3·7899466	4·3880246	83	3·7723817	4·3680524
84	3·7176115	4·3005511	84	3·7007368	4·2815860	84	3·6831719	4·2617504
85	3·6222887	4·1878923	85	3·6054140	4·1690472	85	3·5878491	4·1493404
86	3·5205053	4·0688201	86	3·5036306	4·0500881	86	3·4860657	4·0305050
87	3·4119035	3·9430025	87	3·3950288	3·9243791	87	3·3774639	3·9049124
88	3·2961151	3·8100980	88	3·2792404	3·7915763	88	3·2616755	3·7722212
89	3·1727617	3·6697509	89	3·1558870	3·6513275	89	3·1383221	3·6320765
90	3·0414542	3·5215970	90	3·0245795	3·5032635	90	3·0070146	3·4841133
91	2·9017937	3·3652530	91	2·8849190	3·3470073	91	2·8673541	3·3279516
92	2·7533706	3·2003285	92	2·7364959	3·1821661	92	2·7189310	3·1631999
93	2·5957651	3·0264160	93	2·5788904	3·0083314	93	2·5613255	2·9894516
94	2·4285470	2·8430907	94	2·4116723	2·8250813	94	2·3941074	2·8062817
95	2·2512759	2·6499061	95	2·2344012	2·6319691	95	2·2168363	2·6132476
96	2·0635010	2·4463849	96	2·0466263	2·4285170	96	2·0290614	2·4098723
97	1·8647611	2·2320012	97	1·8478864	2·2142010	97	1·8303215	2·1956295
98	1·6545848	2·0061425	98	1·6377101	1·9884096	98	1·6201452	1·9699119
99	1·4324904	1·7680317	99	1·4156157	1·7503695	99	1·3980508	1·7319472
100	1·1979856	1·5165578	100	1·1811109	1·4989718	100	1·1635460	1·4806321
101	0·9505681	1·2498951	101	0·9336934	1·2323887	101	0·9161285	1·2141442
102	0·6897251	0·9645472	102	0·6728504	0·9471542	102	0·6552855	0·9290100
103	0·4149335	0·6528939	103	0·3980588	0·6356245	103	0·3804939	0·6176398
104	0·1256599	0·2951271	104	0·1087852	0·2780444	104	0·0912203	0·2602384
105	9·8213605		105	9·8044858		105	9·7869209	
106	9·5014813		106	9·4846066		106	9·4670417	
107	9·1654579		107	9·1485832		107	9·1310183	
108	8·8127156		108	8·7958409		108	8·7782760	
109	8·4426693		109	8·4257946		109	8·4082297	

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of **Female** (y)	60		61			62		
Age of **Male** (x)	$\lambda\ D_{x,\,60}$	$\lambda\ N_{x,\,60}$	**Age** of **Male** (x)	$\lambda\ D_{x,\,61}$	$\lambda\ N_{x,\,61}$	**Age** of **Male** (x)	$\lambda\ D_{x,\,62}$	$\lambda\ N_{x,\,62}$
0	5·5968841	6·5288352	0	5·5777513	6·4972058	0	5·5577192	6·4642672
1	5·5128819	6·5067952	1	5·4937491	6·4748141	1	5·4737170	6·4415021
2	5·4776010	6·4924723	2	5·4584682	6·4603561	2	5·4384361	6·4269009
3	5·4554877	6·4805189	3	5·4363549	6·4483361	3	5·4163228	6·4148078
4	5·4385860	6·4696722	4	5·4194532	6·4374557	4	5·3994211	6·4038898
5	5·4243586	6·4594669	5	5·4052258	6·4272353	5	5·3851937	6·3936531
6	5·4119974	6·4496718	6	5·3928646	6·4174407	6	5·3728325	6·3838560
7	5·4008539	6·4401266	7	5·3817211	6·4079056	7	5·3616890	6·3743300
8	5·3904397	6·4307257	8	5·3713069	6·3985214	8	5·3512748	6·3649624
9	5·3806923	6·4214029	9	5·3615595	6·3892222	9	5·3415274	6·3556851
10	5·3714571	6·4120958	10	5·3523243	6·3799419	10	5·3322922	6·3464322
11	5·3625926	6·4027523	11	5·3434598	6·3706277	11	5·3234277	6·3371475
12	5·3539706	6·3933299	12	5·3348378	6·3612362	12	5·3148057	6·3277865
13	5·3454761	6·3837952	13	5·3263433	6·3517333	13	5·3063112	6·3183153
14	5·3370072	6·3741255	14	5·3178744	6·3420941	14	5·2978423	6·3087074
15	5·3284754	6·3643046	15	5·3093426	6·3323028	15	5·2893105	6·2989461
16	5·3198051	6·3543238	16	5·3006723	6·3223516	16	5·2806402	6·2890232
17	5·3109343	6·3441826	17	5·2918015	6·3122377	17	5·2717694	6·2789376
18	5·3018138	6·3338846	18	5·2826810	6·3019670	18	5·2626489	6·2686927
19	5·2924080	6·3234406	19	5·2732752	6·2915486	19	5·2532431	6·2583006
20	5·2826942	6·3128638	20	5·2635614	6·2809981	20	5·2435293	6·2477750
21	5·2726630	6·3021716	21	5·2535302	6·2703326	21	5·2334981	6·2371357
22	5·2625514	6·2913831	22	5·2434186	6·2595724	22	5·2233865	6·2264027
23	5·2523621	6·2804948	23	5·2332293	6·2487141	23	5·2131972	6·2155734
24	5·2420969	6·2695018	24	5·2229641	6·2377536	24	5·2029320	6·2046435
25	5·2317568	6·2584000	25	5·2126240	6·2266852	25	5·1925919	6·1936087
26	5·2213419	6·2471822	26	5·2022091	6·2155044	26	5·1821770	6·1824623
27	5·2108515	6·2358427	27	5·1917187	6·2042033	27	5·1716866	6·1711991
28	5·2002840	6·2243735	28	5·1811512	6·1927754	28	5·1611191	6·1598110
29	5·1896372	6·2127649	29	5·1705044	6·1812119	29	5·1504723	6·1482904
30	5·1789078	6·2010089	30	5·1597750	6·1695028	30	5·1397429	6·1366280
31	5·1680918	6·1890932	31	5·1489590	6·1576390	31	5·1289269	6·1248129
32	5·1571843	6·1770078	32	5·1380515	6·1456078	32	5·1180194	6·1128352
33	5·1461796	6·1647400	33	5·1270468	6·1333981	33	5·1070147	6·1006816
34	5·1350712	6·1522755	34	5·1159384	6·1209964	34	5·0959063	6·0883407
35	5·1238517	6·1395995	35	5·1047189	6·1083881	35	5·0846868	6·0757973
36	5·1125129	6·1266963	36	5·0933801	6·0955571	36	5·0733480	6·0630364
37	5·1010457	6·1135490	37	5·0819129	6·0824862	37	5·0618808	6·0500409
38	5·0894403	6·1001389	38	5·0703075	6·0691588	38	5·0502754	6·0367925
39	5·0776859	6·0864460	39	5·0585531	6·0555542	39	5·0385210	6·0232735
40	5·0657711	6·0724492	40	5·0466383	6·0416513	40	5·0266062	6·0094624
41	5·0536834	6·0581241	41	5·0345506	6·0274276	41	5·0145185	5·9953359
42	5·0414096	6·0434472	42	5·0222768	6·0128575	42	5·0022447	5·9808711
43	5·0289356	6·0283912	43	5·0098028	5·9979156	43	4·9897707	5·9660406
44	5·0162467	6·0129266	44	4·9971139	5·9825728	44	4·9770818	5·9508170
45	5·0033270	5·9970223	45	4·9841942	5·9667983	45	4·9641621	5·9351692
46	4·9901600	5·9806445	46	4·9710272	5·9505584	46	4·9509951	5·9190643
47	4·9767283	5·9637571	47	4·9575955	5·9338168	47	4·9375634	5·9024660
48	4·9630137	5·9463198	48	4·9438809	5·9165342	48	4·9238488	5·8853350
49	4·9489971	5·9282901	49	4·9298643	5·8986673	49	4·9098322	5·8676291
50	4·9346587	5·9096207	50	4·9155259	5·8801697	50	4·8954938	5·8493009
51	4·9199777	5·8902611	51	4·9008449	5·8609901	51	4·8808128	5·8303000
52	4·9046880	5·8701550	52	4·8855552	5·8410727	52	4·8655231	5·8105697
53	4·8889535	5·8492703	53	4·8698207	5·8203853	53	4·8497886	5·7900793
54	4·8727569	5·8275501	54	4·8536241	5·7988711	54	4·8335920	5·7687710

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	60		61			62		
Age of Male (x)	λ $D_{x,\,60}$	λ $N_{x,\,60}$	Age of Male (x)	λ $D_{x,\,61}$	λ $N_{x,\,61}$	Age of Male (x)	λ $D_{x,\,62}$	λ $N_{x,\,62}$
55	4·8560710	5·8049303	55	4·8369382	5·7764663	55	4·8169061	5·7465810
56	4·8388581	5·7813415	56	4·8197253	5·7531000	56	4·7996932	5·7234390
57	4·8210701	5·7567076	57	4·8019373	5·7286964	57	4·7819052	5·6992671
58	4·8026486	5·7309463	58	4·7835158	5·7031724	58	4·7634837	5·6739830
59	4·7835250	5·7039698	59	4·7643922	5·6764389	59	4·7443601	5·6474964
60	4·7636202	5·6756839	60	4·7444874	5·6484015	60	4·7244553	5·6197115
61	4·7428449	5·6459885	61	4·7237121	5·6189589	61	4·7036800	5·5905271
62	4·7210994	5·6147770	62	4·7019666	5·5880040	62	4·6819345	5·5598349
63	4·6982737	5·5819372	63	4·6791409	5·5554235	63	4·6591088	5·5275205
64	4·6742475	5·5473507	64	4·6551147	5·5210976	64	4·6350826	5·4934633
65	4·6488901	5·5108922	65	4·6297573	5·4849007	65	4·6097252	5·4575361
66	4·6220605	5·4724302	66	4·6029277	5·4466998	66	4·5828956	5·4196058
67	4·5936074	5·4318262	67	4·5744746	5·4063559	67	4·5544425	5·3795316
68	4·5633693	5·3889342	68	4·5442365	5·3637221	68	4·5242044	5·3371666
69	4·5311740	5·3436016	69	4·5120412	5·3186447	69	4·4920091	5·2923558
70	4·4968394	5·2956680	70	4·4777066	5·2709626	70	4·4576745	5·2449369
71	4·4601728	5·2449649	71	4·4410400	5·2205066	71	4·4210079	5·1947402
72	4·4209712	5·1913147	72	4·4018384	5·1670996	72	4·3818063	5·1415880
73	4·3790215	5·1345335	73	4·3598887	5·1105546	73	4·3398566	5·0852938
74	4·3340999	5·0744269	74	4·3149671	5·0506794	74	4·2949350	5·0256613
75	4·2859726	5·0107921	75	4·2668398	4·9872689	75	4·2468077	4·9624891
76	4·2343952	4·9434164	76	4·2152624	4·9201108	76	4·1952303	4·8955618
77	4·1791133	4·8720776	77	4·1599805	4·8489831	77	4·1399484	4·8246581
78	4·1198619	4·7965445	78	4·1007291	4·7736533	78	4·0806970	4·7495454
79	4·0563658	4·7165751	79	4·0372330	4·6938790	79	4·0172009	4·6699804
80	3·9883394	4·6319160	80	3·9692066	4·6094090	80	3·9491745	4·5857112
81	3·9154868	4·5423046	81	3·8963540	4·5199786	81	3·8763219	4·4964747
82	3·8375017	4·4474669	82	3·8183689	4·4253144	82	3·7983368	4·4019964
83	3·7540678	4·3471185	83	3·7349350	4·3251317	83	3·7149029	4·3019920
84	3·6648580	4·2409629	84	3·6457252	4·2191346	84	3·6256931	4·1961654
85	3·5695352	4·1286935	85	3·5504024	4·1060158	85	3·5303703	4·0842098
86	3·4677518	4·0099907	86	3·4486190	3·9884578	86	3·4285869	3·9658064
87	3·3591500	3·8845252	87	3·3400172	3·8631289	87	3·3199851	3·8406261
88	3·2433616	3·7519539	88	3·2242288	3·7306886	88	3·2041967	3·7083266
89	3·1200082	3·6119239	89	3·1008754	3·5907828	89	3·0808433	3·5685549
90	2·9887007	3·4640685	90	2·9695679	3·4430447	90	2·9495358	3·4209451
91	2·8490402	3·3080103	91	2·8299074	3·2870980	91	2·8098753	3·2651199
92	2·7006171	3·1433566	92	2·6814843	3·1225508	92	2·6614522	3·1006875
93	2·5430116	2·9697010	93	2·5238788	2·9489966	93	2·5038467	2·9272435
94	2·3757935	2·7866209	94	2·3566607	2·7660126	94	2·3366286	2·7443650
95	2·1985224	2·5936704	95	2·1793896	2·5731560	95	2·1593575	2·5516086
96	2·0107475	2·3903769	96	1·9916147	2·3699509	96	1·9715826	2·3485015
97	1·8120076	2·1762155	97	1·7928748	2·1558775	97	1·7728427	2·1345235
98	1·6018313	1·9505790	98	1·5826985	1·9303289	98	1·5626664	1·9090712
99	1·3797369	1·7126968	99	1·3606041	1·6925394	99	1·3405720	1·6713802
100	1·1452321	1·4614700	100	1·1260993	1·4414092	100	1·1060672	1·4203602
101	0·8978146	1·1950856	101	0·8786818	1·1751348	101	0·8586497	1·1542048
102	0·6369716	0·9100799	102	0·6178388	0·8902645	102	0·5978067	0·8694781
103	0·3621800	0·5988452	103	0·3430472	0·5792118	103	0·3230151	0·5586126
104	0·0729064	0·2416710	104	0·0537736	0·2222221	104	0·0337415	0·2018885
105	9·7686070		105	9·7494742		105	9·7294421	
106	9·4487278		106	9·4295950		106	9·4095629	
107	9·1127044		107	9·0935716		107	9·0735395	
108	8·7599621		108	8·7408293		108	8·7207972	
109	8·3899158		109	8·3707830		109	8·3507509	

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	63		64			65		
Age of Male (x)	$\lambda\ D_{x,\,63}$	$\lambda\ N_{x,\,63}$	Age of Male (x)	$\lambda\ D_{x,\,64}$	$\lambda\ N_{x,\,64}$	Age of Male (x)	$\lambda\ D_{x,\,65}$	$\lambda\ N_{x,\,65}$
0	5·5366961	6·4299282	0	5·5145794	6·3940919	0	5·4912558	6·3566510
1	5·4526939	6·4067671	1	5·4305772	6·3705096	1	5·4072536	6·3326246
2	5·4174130	6·3920130	2	5·3952963	6·3555935	2	5·3719727	6·3175347
3	5·3952997	6·3798425	3	5·3731830	6·3433393	3	5·3498594	6·3051918
4	5·3783990	6·3688817	4	5·3562813	6·3323329	4	5·3329577	6·2941356
5	5·3641706	6·3586259	5	5·3420539	6·3220538	5	5·3187303	6·2838311
6	5·3518094	6·3488256	6	5·3296927	6·3122481	6	5·3063691	6·2740162
7	5·3406659	6·3393061	7	5·3185492	6·3027351	7	5·2952256	6·2645083
8	5·3302517	6·3299547	8	5·3081350	6·2933974	8	5·2848114	6·2551844
9	5·3205043	6·3206995	9	5·2983876	6·2841642	9	5·2750640	6·2459710
10	5·3112691	6·3114726	10	5·2891524	6·2749638	10	5·2658288	6·2367972
11	5·3024016	6·3022177	11	5·2802879	6·2657379	11	5·2569643	6·2276009
12	5·2937826	6·2928880	12	5·2716659	6·2564394	12	5·2483423	6·2183333
13	5·2852881	6·2834475	13	5·2631714	6·2470311	13	5·2398478	6·2089568
14	5·2768192	6·2738713	14	5·2547025	6·2374852	14	5·2313789	6·1994425
15	5·2682874	6·2641406	15	5·2461707	6·2277849	15	5·2228471	6·1897718
16	5·2596171	6·2542461	16	5·2375004	6·2179199	16	5·2141768	6·1799356
17	5·2507163	6·2441872	17	5·2286296	6·2078877	17	5·2053060	6·1699312
18	5·2416258	6·2339692	18	5·2195091	6·1976948	18	5·1961855	6·1597633
19	5·2322290	6·2236016	19	5·2101033	6·1873526	19	5·1867797	6·1494445
20	5·2225062	6·2131014	20	5·2003895	6·1768758	20	5·1770659	6·1389920
21	5·2124750	6·2024867	21	5·1903583	6·1662863	21	5·1670347	6·1284251
22	5·2023934	6·1917803	22	5·1802467	6·1556050	22	5·1569231	6·1177696
23	5·1921741	6·1809790	23	5·1700574	6·1448310	23	5·1467338	6·1070213
24	5·1819039	6·1700791	24	5·1597922	6·1339596	24	5·1364686	6·0961782
25	5·1715638	6·1590758	25	5·1494521	6·1229871	25	5·1261285	6·0852346
26	5·1611539	6·1479640	26	5·1390372	6·1119077	26	5·1157136	6·0741869
27	5·1506635	6·1367365	27	5·1285468	6·1007158	27	5·1052232	6·0630286
28	5·1400960	6·1253877	28	5·1179793	6·0894034	28	5·0946557	6·0517528
29	5·1294192	6·1139079	29	5·1073325	6·0779646	29	5·0840089	6·0403516
30	5·1187198	6·1022899	30	5·0966031	6·0663890	30	5·0732795	6·0288181
31	5·1079038	6·0905230	31	5·0857871	6·0546679	31	5·0624635	6·0171407
32	5·0969963	6·0785961	32	5·0748796	6·0427905	32	5·0515560	6·0053109
33	5·0859916	6·0664978	33	5·0638749	6·0307451	33	5·0405513	5·9933168
34	5·0748832	6·0542150	34	5·0527665	6·0185192	34	5·0294429	5·9811456
35	5·0636637	6·0417345	35	5·0415470	6·0060993	35	5·0182234	5·9687841
36	5·0523249	6·0290407	36	5·0302082	5·9934706	36	5·0068846	5·9562184
37	5·0408577	6·0161179	37	5·0187410	5·9806174	37	4·9954174	5·9434326
38	5·0292523	6·0029475	38	5·0071356	5·9675223	38	4·9838120	5·9304096
39	5·0174979	5·9895108	39	4·9953812	5·9541661	39	4·9720576	5·9171312
40	5·0055831	5·9757883	40	4·9834664	5·9405296	40	4·9601428	5·9035781
41	4·9934954	5·9617572	41	4·9713787	5·9265906	41	4·9480551	5·8897285
42	4·9812216	5·9473939	42	4·9591049	5·9123258	42	4·9357813	5·8755591
43	4·9687476	5·9326724	43	4·9466309	5·8977098	43	4·9233073	5·8610454
44	4·9560587	5·9175646	44	4·9339420	5·8827151	44	4·9106184	5·8461603
45	4·9431390	5·9020408	45	4·9210223	5·8673115	45	4·8976987	5·8308740
46	4·9299720	5·8860674	46	4·9078553	5·8514671	46	4·8845317	5·8151545
47	4·9165403	5·8696096	47	4·8944236	5·8351460	47	4·8711000	5·7989673
48	4·9028257	5·8526277	48	4·8807090	5·8183102	48	4·8573854	5·7822734
49	4·8888091	5·8350795	49	4·8666924	5·8009169	49	4·8433688	5·7650319
50	4·8744707	5·8169187	50	4·8523540	5·7829202	50	4·8290304	5·7471960
51	4·8597897	5·7980939	51	4·8376730	5·7642691	51	4·8143494	5·7287153
52	4·8445090	5·7785493	52	4·8223833	5·7449074	52	4·7990597	5·7095337
53	4·8287655	5·7582539	53	4·8066488	5·7248053	53	4·7833252	5·6896221
54	4·8125639	5·7371509	54	4·7904522	5·7039054	54	4·7671286	5·6689237

ENGLISH LIFE TABLE, No. 3.

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	63			64			65	
Age of Male (x)	$\lambda\ D_{x,\,63}$	$\lambda\ N_{x,\,63}$	Age of Male (x)	$\lambda\ D_{x,\,64}$	$\lambda\ N_{x,\,64}$	Age of Male (x)	$\lambda\ D_{x,\,65}$	$\lambda\ N_{x,\,65}$
55	4·7958830	5·7151755	55	4·7737663	5·6821442	55	4·7504427	5·6473741
56	4·7786701	5·6922575	56	4·7565534	5·6594497	56	4·7332298	5·6249024
57	4·7608821	5·6683192	57	4·7387654	5·6357446	57	4·7154418	5·6014300
58	4·7424606	5·6432763	58	4·7203439	5·6109447	58	4·6970203	5·5768727
59	4·7233370	5·6170393	59	4·7012203	5·5849585	59	4·6778967	5·5511389
60	4·7034322	5·5895109	60	4·6813155	5·5576895	60	4·6579919	5·5241303
61	4·6826569	5·5605888	61	4·6605402	5·5290335	61	4·6372166	5·4957433
62	4·6609114	5·5301644	62	4·6387947	5·4988810	62	4·6154711	5·4658663
63	4·6380857	5·4981222	63	4·6159690	5·4671160	63	4·5926454	5·4343827
64	4·6140595	5·4643405	64	4·5919428	5·4336159	64	4·5686192	5·4011692
65	4·5887021	5·4286913	65	4·5665854	5·3982516	65	4·5432618	5·3660958
66	4·5618725	5·3900397	66	4·5397558	5·3608872	66	4·5164322	5·3290250
67	4·5334194	5·3512451	67	4·5113027	5·3213801	67	4·4879791	5·2898140
68	4·5031813	5·3091586	68	4·4810646	5·2795817	68	4·4577410	5·2483117
69	4·4709860	5·2646250	69	4·4488693	5·2353348	69	4·4255457	5·2043615
70	4·4366514	5·2174807	70	4·4145347	5·1884760	70	4·3912111	5·1577975
71	4·3999848	5·1675551	71	4·3778681	5·1388333	71	4·3545445	5·1084476
72	4·3607832	5·1146697	72	4·3386665	5·0862263	72	4·3153429	5·0561317
73	4·3188335	5·0586378	73	4·2967168	5·0304686	73	4·2733932	5·0006597
74	4·2739119	4·9992633	74	4·2517952	4·9713635	74	4·2284716	4·9418353
75	4·2257846	4·9363403	75	4·2036679	4·9087053	75	4·1803143	4·8794537
76	4·1742072	4·8696582	76	4·1520905	4·8422790	76	4·1287669	4·8132987
77	4·1189253	4·7989916	77	4·0968086	4·7718637	77	4·0734850	4·7431459
78	4·0596739	4·7241087	78	4·0375572	4·6972241	78	4·0142336	4·6687632
79	3·9961778	4·6447665	79	3·9740611	4·6181176	79	3·9507375	4·5899062
80	3·9281514	4·5607121	80	3·9060347	4·5342918	80	3·8827111	4·5063214
81	3·8552988	4·4716821	81	3·8331821	4·4454821	81	3·8098585	4·4177456
82	3·7773137	4·3774032	82	3·7551970	4·3514149	82	3·7318734	4·3239036
83	3·6938798	4·2775895	83	3·6717631	4·2518056	83	3·6484395	4·2245111
84	3·6046700	4·1719461	84	3·5825533	4·1463575	84	3·5592297	4·1192724
85	3·5093472	4·0601655	85	3·4872305	4·0347647	85	3·4639069	4·0078795
86	3·4075638	3·9419296	86	3·3854471	3·9167082	86	3·3621235	3·8900156
87	3·2989620	3·8169085	87	3·2768453	3·7918590	87	3·2535217	3·7653496
88	3·1831736	3·6847619	88	3·1610569	3·6598754	88	3·1377333	3·6335421
89	3·0598202	3·5451351	89	3·0377035	3·5204062	89	3·0143799	3·4942395
90	2·9285127	3·3976630	90	2·9063960	3·3730826	90	2·8830724	3·3470774
91	2·7888522	3·2419693	91	2·7667355	3·2175308	91	2·7434119	3·1916784
92	2·6404291	3·0776626	92	2·6183124	3·0533598	92	2·5949888	3·0276529
93	2·4828236	2·9043373	93	2·4607069	2·8801640	93	2·4373833	2·8545969
94	2·3156055	2·7215732	94	2·2934888	2·6975222	94	2·2701652	2·6720895
95	2·1383344	2·5289269	95	2·1162177	2·5049953	95	2·0928941	2·4796891
96	1·9505595	2·3259256	96	1·9284428	2·3021090	96	1·9051192	2·2769280
97	1·7518196	2·1120514	97	1·7297029	2·0883481	97	1·7063793	2·0632894
98	1·5416433	1·8867028	98	1·5195266	1·8631128	98	1·4962030	1·8381770
99	1·3195489	1·6491206	99	1·2974322	1·6256468	99	1·2741086	1·6008390
100	1·0850441	1·3982162	100	1·0629274	1·3748711	100	1·0396038	1·3501995
101	0·8376266	1·1321988	101	0·8155099	1·1089977	101	0·7921863	1·0844870
102	0·5767836	0·8476282	102	0·5546669	0·8246139	102	0·5313433	0·8002908
103	0·3019920	0·5369622	103	0·2798753	0·5141624	103	0·2565517	0·4900990
104	0·0127184	0·1804986	104	9·9906017	0·1580004	104	9·9672781	0·1342409
105	9·7084190		105	9·6863023		105	9·6629787	
106	9·3885398		106	9·3664231		106	9·3430995	
107	9·0525164		107	9·0303997		107	9·0070761	
108	8·6997741		108	8·6776574		108	8·6543338	
109	8·3297278		109	8·3076111		109	8·2842875	

ENGLISH LIFE TABLE, No. 3.

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	66			67			68	
Age of Male (x)	$\lambda\ D_{x,\,66}$	$\lambda\ N_{x,\,66}$	Age of Male (x)	$\lambda\ D_{x,\,67}$	$\lambda\ N_{x,\,67}$	Age of Male (x)	$\lambda\ D_{x,\,68}$	$\lambda\ N_{x,\,68}$
0	5·4666007	6·3174940	0	5·4404788	6·2764991	0	5·4127439	6·2335367
1	5·3825985	6·2929968	1	5·3564766	6·2515056	1	5·3287417	6·2080206
2	5·3473176	6·2777245	2	5·3211957	6·2360390	2	5·2934608	6·1923497
3	5·3252043	6·2652849	3	5·2990824	6·2234982	3	5·2713475	6·1797003
4	5·3083026	6·2541752	4	5·2821807	6·2123293	4	5·2544458	6·1684692
5	5·2940752	6·2438424	5	5·2679533	6·2019652	5	5·2402184	6·1580689
6	5·2817140	6·2340169	6	5·2555921	6·1921271	6	5·2278572	6·1482164
7	5·2705705	6·2245106	7	5·2444486	6·1826211	7	5·2167137	6·1387093
8	5·2601563	6·2151997	8	5·2340344	6·1733203	8	5·2062995	6·1294176
9	5·2504089	6·2060067	9	5·2242870	6·1641470	9	5·1965521	6·1202616
10	5·2411737	6·1968571	10	5·2150518	6·1550234	10	5·1873169	6·1111627
11	5·2323092	6·1876908	11	5·2061873	6·1458845	11	5·1784524	6·1020535
12	5·2236872	6·1784545	12	5·1975653	6·1366804	12	5·1698304	6·0928792
13	5·2151927	6·1691099	13	5·1890708	6·1273675	13	5·1613359	6·0835994
14	5·2067238	6·1596273	14	5·1806019	6·1179166	14	5·1528670	6·0741799
15	5·1981920	6·1499873	15	5·1720701	6·1083072	15	5·1443352	6·0646011
16	5·1895217	6·1401790	16	5·1633998	6·0985278	16	5·1356649	6·0548505
17	5·1806509	6·1302016	17	5·1545290	6·0885762	17	5·1267941	6·0449257
18	5·1715304	6·1200591	18	5·1454085	6·0784590	18	5·1176736	6·0348321
19	5·1621246	6·1097637	19	5·1360027	6·0681870	19	5·1082678	6·0245834
20	5·1524108	6·0993336	20	5·1262889	6·0577788	20	5·0985540	6·0141966
21	5·1423796	6·0887905	21	5·1162577	6·0472575	21	5·0885228	6·0036966
22	5·1322680	6·0781580	22	5·1061461	6·0366489	22	5·0784112	5·9931098
23	5·1220787	6·0674354	23	5·0959568	6·0259498	23	5·0682219	5·9824355
24	5·1118135	6·0566186	24	5·0856916	6·0151593	24	5·0579567	5·9716687
25	5·1014734	6·0457040	25	5·0753515	6·0042721	25	5·0476166	5·9608084
26	5·0910585	6·0346862	26	5·0649366	5·9932837	26	5·0372017	5·9498480
27	5·0805681	6·0235603	27	5·0544462	5·9821885	27	5·0267113	5·9387828
28	5·0700006	6·0123192	28	5·0438787	5·9709806	28	5·0161438	5·9276069
29	5·0593538	6·0009557	29	5·0332319	5·9596528	29	5·0054970	5·9163134
30	5·0486244	5·9894610	30	5·0225025	5·9481967	30	4·9947676	5·9048939
31	5·0378084	5·9778274	31	5·0116865	5·9366032	31	4·9839516	5·8933401
32	5·0269009	5·9660426	32	5·0007790	5·9248636	32	4·9730441	5·8816421
33	5·0158962	5·9540972	33	4·9897743	5·9129651	33	4·9620394	5·8697894
34	5·0047878	5·9419793	34	4·9786659	5·9008974	34	4·9509310	5·8577703
35	4·9935683	5·9296742	35	4·9674464	5·8886471	35	4·9397115	5·8455723
36	4·9822295	5·9171693	36	4·9561076	5·8762004	36	4·9283727	5·8331819
37	4·9707623	5·9044484	37	4·9446404	5·8635424	37	4·9169055	5·8205840
38	4·9591569	5·8914953	38	4·9330350	5·8506566	38	4·9053001	5·8077631
39	4·9474025	5·8782919	39	4·9212806	5·8375254	39	4·8935457	5·7947014
40	4·9354877	5·8648189	40	4·9093658	5·8241300	40	4·8816309	5·7813806
41	4·9234000	5·8510555	41	4·8972781	5·8104495	41	4·8695432	5·7677805
42	4·9111262	5·8369788	42	4·8850043	5·7964622	42	4·8572694	5·7538789
43	4·8986522	5·8225641	43	4·8725303	5·7821434	43	4·8447954	5·7396526
44	4·8859633	5·8077850	44	4·8598414	5·7674670	44	4·8321065	5·7250754
45	4·8730436	5·7926124	45	4·8469217	5·7524043	45	4·8191868	5·7101190
46	4·8598766	5·7770148	46	4·8337547	5·7369243	46	4·8060198	5·6947531
47	4·8464449	5·7609573	47	4·8203230	5·7209931	47	4·7925881	5·6789439
48	4·8327303	5·7444023	48	4·8066084	5·7045728	48	4·7788735	5·6626544
49	4·8187137	5·7273081	49	4·7925918	5·6876227	49	4·7648569	5·6458436
50	4·8043753	5·7096297	50	4·7782534	5·6700969	50	4·7505185	5·6284671
51	4·7896943	5·6913156	51	4·7635724	5·6519460	51	4·7358375	5·6104742
52	4·7744046	5·6723105	52	4·7482827	5·6331135	52	4·7205478	5·5918104
53	4·7586701	5·6525864	53	4·7325482	5·6135729	53	4·7048133	5·5724493
54	4·7424735	5·6320863	54	4·7163516	5·5932679	54	4·6886167	5·5523353

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	66		67			68		
Age of Male (x)	$\lambda\ D_{x,\,66}$	$\lambda\ N_{x,\,66}$	Age of Male (x)	$\lambda\ D_{x,\,67}$	$\lambda\ N_{x,\,67}$	Age of Male (x)	$\lambda\ D_{x,\,68}$	$\lambda\ N_{x,\,68}$
55	4·7257876	5·6107465	55	4·6996657	5·5721344	55	4·6719308	5·5314047
56	4·7085747	5·5884952	56	4·6824528	5·5501015	56	4·6547179	5·5095863
57	4·6907867	5·5652546	57	4·6646648	5·5270900	57	4·6369299	5·4868018
58	4·6723652	5·5409391	58	4·6462433	5·5030154	58	4·6185084	5·4629651
59	4·6532416	5·5154573	59	4·6271197	5·4777845	59	4·5993848	5·4379841
60	4·6333368	5·4887104	60	4·6072149	5·4512990	60	4·5794800	5·4117586
61	4·6125615	5·4605932	61	4·5864396	5·4234528	61	4·5587047	5·3841829
62	4·5908160	5·4309948	62	4·5646941	5·3941334	62	4·5369592	5·3551438
63	4·5679903	5·3997960	63	4·5418684	5·3632226	63	4·5141335	5·3245210
64	4·5439641	5·3668733	64	4·5178422	5·3305937	64	4·4901073	5·2921892
65	4·5186067	5·3320953	65	4·4924848	5·2961156	65	4·4647499	5·2580137
66	4·4917771	5·2953247	66	4·4656552	5·2596493	66	4·4379203	5·2218556
67	4·4633240	5·2564161	67	4·4372021	5·2210492	67	4·4094672	5·1835685
68	4·4330859	5·2152184	68	4·4069640	5·1801623	68	4·3792291	5·1429983
69	4·4008906	5·1715723	69	4·3747687	5·1368289	69	4·3470338	5·0999837
70	4·3665560	5·1253131	70	4·3404341	5·0908818	70	4·3126992	5·0543568
71	4·3298894	5·0762661	71	4·3037675	5·0421470	71	4·2760326	5·0059411
72	4·2906878	5·0242500	72	4·2645659	4·9904410	72	4·2368310	4·9545546
73	4·2487381	4·9690761	73	4·2226162	4·9355743	73	4·1948813	4·9000048
74	4·2038165	4·9105449	74	4·1776946	4·8773477	74	4·1499597	4·8420923
75	4·1556892	4·8484502	75	4·1295673	4·8155532	75	4·1018324	4·7806082
76	4·1041118	4·7825787	76	4·0779899	4·7499743	76	4·0502550	4·7153355
77	4·0488299	4·7127027	77	4·0227080	4·6803881	77	3·9949731	4·6460480
78	3·9895785	4·6385891	78	3·9634566	4·6065564	78	3·9357217	4·5725110
79	3·9260824	4·5599945	79	3·8999605	4·5282366	79	3·8722256	4·4944787
80	3·8580560	4·4766645	80	3·8319341	4·4451742	80	3·8041992	4·4116964
81	3·7852034	4·3883348	81	3·7590815	4·3571045	81	3·7313466	4·3238991
82	3·7072183	4·2947320	82	3·6810964	4·2637527	82	3·6533615	4·2308118
83	3·6237844	4·1955695	83	3·5976625	4·1648342	83	3·5699276	4·1321486
84	3·5345746	4·0905522	84	3·5084527	4·0600512	84	3·4807178	4·0276143
85	3·4392518	3·9793731	85	3·4131299	3·9490981	85	3·3853950	3·9168991
86	3·3374684	3·8617136	86	3·3113465	3·8316561	86	3·2836116	3·7996872
87	3·2288666	3·7372444	87	3·2027447	3·7073956	87	3·1750098	3·6756483
88	3·1130782	3·6056239	88	3·0869563	3·5759761	88	3·0592214	3·5444413
89	2·9897248	3·4665016	89	2·9636029	3·4370452	89	2·9358680	3·4057141
90	2·8584173	3·3195109	90	2·8322954	3·2902381	90	2·8045605	3·2591027
91	2·7187568	3·1642764	91	2·6926349	3·1351785	91	2·6649000	3·1042302
92	2·5703337	3·0004076	92	2·5442118	2·9714781	92	2·5164769	2·9407082
93	2·4127282	2·8275011	93	2·3866063	2·7987321	93	2·3588714	2·7681347
94	2·2455101	2·6451382	94	2·2193882	2·6165228	94	2·1916533	2·5860897
95	2·0682390	2·4528761	95	2·0421171	2·4244112	95	2·0143822	2·3941364
96	1·8804641	2·2502488	96	1·8543422	2·2219265	96	1·8266073	2·1918072
97	1·6817242	2·0367418	97	1·6556023	2·0085614	97	1·6278674	1·9785941
98	1·4715479	1·8117626	98	1·4454260	1·7837243	98	1·4176911	1·7539092
99	1·2494535	1·5745614	99	1·2233316	1·5466722	99	1·1955967	1·5170151
100	1·0149487	1·3240725	100	0·9888268	1·2963449	100	0·9610919	1·2668617
101	0·7675312	1·0585286	101	0·7414093	1·0309881	101	0·7136744	1·0017078
102	0·5066882	0·7745462	102	0·4805663	0·7472253	102	0·4528314	0·7181943
103	0·2318966	0·4646237	103	0·2057747	0·4375920	103	0·1780398	0·4088672
104	9·9426230	0·1091396	104	9·9165011	0·0824981	104	9·8887662	0·0541916
105	9·6383236		105	9·6122017		105	9·5844668	
106	9·3184444		106	9·2923225		106	9·2645876	
107	8·9824210		107	8·9562991		107	8·9285642	
108	8·6296787		108	8·6035568		108	8·5758219	
109	8·2596324		109	8·2335105		109	8·2057756	

JOINT LIVES:—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of **Female** (y)	69		70			71		
Age of **Male** (x)	$\lambda\ D_{x,\,69}$	$\lambda\ N_{x,\,69}$	**Age** of **Male** (x)	$\lambda\ D_{x,\,70}$	$\lambda\ N_{x,\,70}$	**Age** of **Male** (x)	$\lambda\ D_{x,\,71}$	$\lambda\ N_{x,\,71}$
0	5·3832386	6·1884709	0	5·3517949	6·1411531	0	5·3182336	6·0914306
1	5·2992364	6·1624034	1	5·2677927	6·1145089	1	5·2342314	6·0641791
2	5·2639555	6·1465178	2	5·2325118	6·0983963	2	5·1989505	6·0478311
3	5·2418422	6·1337544	3	5·2103985	6·0855124	3	5·1768372	6·0348193
4	5·2249405	6·1224551	4	5·1934968	6·0741419	4	5·1599355	6·0233726
5	5·2107131	6·1120168	5	5·1792694	6·0636610	5	5·1457081	6·0128466
6	5·1983519	6·1021455	6	5·1669082	6·0537691	6	5·1333469	6·0029307
7	5·1872084	6·0926362	7	5·1557647	6·0442540	7	5·1222034	5·9934080
8	5·1767942	6·0833521	8	5·1453505	6·0349772	8	5·1117892	5·9841356
9	5·1670468	6·0742129	9	5·1356031	6·0258534	9	5·1020418	5·9750272
10	5·1578116	6·0651371	10	5·1263679	6·0168003	10	5·0928066	5·9659957
11	5·1489471	6·0560564	11	5·1175034	6·0077469	11	5·0839421	5·9569695
12	5·1403251	6·0469142	12	5·1088814	5·9986355	12	5·0753201	5·9478883
13	5·1318306	6·0376652	13	5·1003869	5·9894196	13	5·0668256	5·9387043
14	5·1233617	6·0282788	14	5·0919180	5·9800639	14	5·0583567	5·9293816
15	5·1148299	6·0187301	15	5·0833862	5·9705473	15	5·0498249	5·9198946
16	5·1061596	6·0090083	16	5·0747159	5·9608536	16	5·0411546	5·9102310
17	5·0972888	5·9991101	17	5·0658451	5·9509817	17	5·0322838	5·9003852
18	5·0881683	5·9890407	18	5·0567246	5·9409366	18	5·0231633	5·8903634
19	5·0787625	5·9788135	19	5·0473188	5·9307310	19	5·0137575	5·8801794
20	5·0690487	5·9684484	20	5·0376050	5·9203858	20	5·0040437	5·8698540
21	5·0590175	5·9579687	21	5·0275738	5·9099265	21	4·9940125	5·8594134
22	5·0489059	5·9474038	22	5·0174622	5·8993822	22	4·9839009	5·8488893
23	5·0387166	5·9367514	23	5·0072729	5·8887516	23	4·9737116	5·8382797
24	5·0284514	5·9260094	24	4·9970077	5·8780324	24	4·9634464	5·8275825
25	5·0181113	5·9151734	25	4·9866676	5·8672212	25	4·9531063	5·8167947
26	5·0076964	5·9042404	26	4·9762527	5·8563137	26	4·9426914	5·8059122
27	4·9972060	5·8932041	27	4·9657623	5·8453050	27	4·9322010	5·7949299
28	4·9866385	5·8820588	28	4·9551948	5·8341895	28	4·9216335	5·7838424
29	4·9759917	5·8707982	29	4·9445480	5·8229602	29	4·9109867	5·7726435
30	4·9652623	5·8594140	30	4·9338186	5·8116099	30	4·9002573	5·7613256
31	4·9544463	5·8478978	31	4·9230026	5·8001299	31	4·8894413	5·7498805
32	4·9435388	5·8362406	32	4·9120951	5·7885114	32	4·8785338	5·7382991
33	4·9325341	5·8244313	33	4·9010904	5·7767442	33	4·8675291	5·7265716
34	4·9214257	5·8124591	34	4·8899820	5·7648166	34	4·8564207	5·7146872
35	4·9102062	5·8003114	35	4·8787625	5·7527172	35	4·8452012	5·7026338
36	4·8988674	5·7879748	36	4·8674237	5·7404323	36	4·8338624	5·6903987
37	4·8874002	5·7754349	37	4·8559565	5·7279480	37	4·8223952	5·6779677
38	4·8757948	5·7626761	38	4·8443511	5·7152489	38	4·8107898	5·6653260
39	4·8640404	5·7496814	39	4·8325967	5·7023184	39	4·7990354	5·6524570
40	4·8521256	5·7364324	40	4·8206819	5·6891385	40	4·7871206	5·6393432
41	4·8400379	5·7229094	41	4·8085942	5·6756896	41	4·7750329	5·6259655
42	4·8277641	5·7090909	42	4·7963204	5·6619508	42	4·7627591	5·6123030
43	4·8152901	5·6949533	43	4·7838464	5·6478990	43	4·7502851	5·5983336
44	4·8026012	5·6804718	44	4·7711575	5·6335091	44	4·7375962	5·5840324
45	4·7896815	5·6656182	45	4·7582378	5·6187544	45	4·7246765	5·5693724
46	4·7765145	5·6503621	46	4·7450708	5·6036047	46	4·7115095	5·5543249
47	4·7630828	5·6346709	47	4·7316391	5·5880272	47	4·6980778	5·5388574
48	4·7493682	5·6185078	48	4·7179245	5·5719863	48	4·6843632	5·5229339
49	4·7353516	5·6018325	49	4·7039079	5·5554416	49	4·6703466	5·5065156
50	4·7210132	5·5846002	50	4·6895695	5·5383494	50	4·6560082	5·4895584
51	4·7063322	5·5667617	51	4·6748885	5·5206598	51	4·6413272	5·4720132
52	4·6910425	5·5482609	52	4·6595988	5·5023184	52	4·6260375	5·4538251
53	4·6753080	5·5290751	53	4·6438643	5·4833017	53	4·6103030	5·4349740
54	4·6591114	5·5091477	54	4·6276677	5·4635565	54	4·5941064	5·4154043

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of Female (y)	69			70			71	
Age of Male (x)	λ $D_{x,69}$	λ $N_{x,69}$	Age of Male (x)	λ $D_{x,70}$	λ $N_{x,70}$	Age of Male (x)	λ $D_{x,71}$	λ $N_{x,71}$
55	4·6424255	5·4884157	55	4·6109818	5·4430185	55	4·5774205	5·3950557
56	4·6252126	5·4668083	56	4·5937689	5·4216174	56	4·5602076	5·3738561
57	4·6074246	5·4442465	57	4·5759809	5·3992751	57	4·5424196	5·3517279
58	4·5890031	5·4206456	58	4·5575594	5·3759049	58	4·5239981	5·3285854
59	4·5698795	5·3959113	59	4·5384358	5·3514152	59	4·5048745	5·3043348
60	4·5499747	5·3699447	60	4·5185310	5·3257038	60	4·4849697	5·2788765
61	4·5291994	5·3426380	61	4·4977557	5·2986647	61	4·4641944	5·2521012
62	4·5074539	5·3138782	62	4·4760102	5·2701827	62	4·4424489	5·2238953
63	4·4846282	5·2835446	63	4·4531845	5·2401372	63	4·4196232	5·1941362
64	4·4606020	5·2515095	64	4·4291583	5·2083998	64	4·3955970	5·1626952
65	4·4352446	5·2176397	65	4·4038009	5·1748352	65	4·3702396	5·1294363
66	4·4084150	5·1817927	66	4·3769713	5·1393021	66	4·3434100	5·0942165
67	4·3799619	5·1438221	67	4·3485182	5·1016505	67	4·3149569	5·0568867
68	4·3497238	5·1035728	68	4·3182801	5·0617253	68	4·2847188	5·0172876
69	4·3175285	5·0608825	69	4·2860848	5·0193636	69	4·2525235	4·9752571
70	4·2831939	5·0155819	70	4·2517502	4·9743942	70	4·2181889	4·9306231
71	4·2465273	4·9674937	71	4·2150836	4·9266393	71	4·1815223	4·8832064
72	4·2073257	4·9164334	72	4·1758820	4·8759128	72	4·1423207	4·8328192
73	4·1653760	4·8622089	73	4·1339323	4·8220216	73	4·1003710	4·7792674
74	4·1204544	4·8046198	74	4·0890107	4·7647633	74	4·0554494	4·7223484
75	4·0723271	4·7434557	75	4·0408834	4·7039282	75	4·0073221	4·6618496
76	4·0207497	4·6784993	76	3·9893060	4·6392970	76	3·9557447	4·5975527
77	3·9654678	4·6095228	77	3·9340241	4·5706418	77	3·9004628	4·5292277
78	3·9062164	4·5362908	78	3·8747727	4·4977260	78	3·8412114	4·4566372
79	3·8427203	4·4585578	79	3·8112766	4·4203026	79	3·7777153	4·3795342
80	3·7746939	4·3760675	80	3·7432502	4·3381161	80	3·7096889	4·2976612
81	3·7018413	4·2885549	81	3·6703976	4·2508999	81	3·6368363	4·2107526
82	3·6238562	4·1957444	82	3·5924125	4·1583776	82	3·5588512	4·1185306
83	3·5404223	4·0973499	83	3·5089786	4·0602642	83	3·4754173	4·0207085
84	3·4512125	3·9930745	84	3·4197688	3·9562611	84	3·3862075	3·9169895
85	3·3558897	3·8826122	85	3·3244460	3·8460611	85	3·2908847	3·8070653
86	3·2541063	3·7656418	86	3·2226626	3·7293471	86	3·1891013	3·6906169
87	3·1455045	3·6418368	87	3·1140608	3·6057865	87	3·0804995	3·5673158
88	3·0297161	3·5108545	88	2·9982724	3·4750417	88	2·9647111	3·4368181
89	2·9063627	3·3723434	89	2·8749190	3·3367582	89	2·8413577	3·2987743
90	2·7750552	3·2259391	90	2·7436115	3·1905729	90	2·7100502	3·1528196
91	2·6353947	3·0712659	91	2·6039510	3·0361097	91	2·5703897	2·9985779
92	2·4869716	2·9079340	92	2·4555279	2·8729809	92	2·4219666	2·8356621
93	2·3293661	2·7355422	93	2·2979224	2·7007825	93	2·2643611	2·6636699
94	2·1621480	2·5536743	94	2·1307043	2·5190992	94	2·0971430	2·4821830
95	1·9848769	2·3618894	95	1·9534332	2·3274952	95	1·9198719	2·2907697
96	1·7971020	2·1597250	96	1·7656583	2·1255070	96	1·7320970	2·0889660
97	1·5983621	1·9466748	97	1·5669184	1·9126280	97	1·5333571	1·8762715
98	1·3881858	1·7221533	98	1·3567421	1·6882810	98	1·3231808	1·6521070
99	1·1660914	1·4854290	99	1·1346477	1·4517373	99	1·1010864	1·4157560
100	0·9315866	1·2354577	100	0·9001429	1·2019649	100	0·8665816	1·1661932
101	0·6841691	0·9705189	101	0·6527254	0·9372520	101	0·6191641	0·9017252
102	0·4233261	0·6872792	102	0·3918824	0·6542921	102	0·3583211	0·6190620
103	0·1485345	0·3783070	103	0·1170908	0·3457069	103	0·0835295	0·3108632
104	9·8592609	0·0240750	104	9·8278172	$\bar{1}$·9919788	104	9·7942559	$\bar{1}$·9577030
105	9·5549615		105	9·5235178		105	9·4899565	
106	9·2350823		106	9·2036386		106	9·1700773	
107	8·8990589		107	8·8676152		107	8·8340539	
108	8·5463166		108	8·5148729		108	8·4813116	
109	8·1762703		109	8·1448266		109	8·1112653	

JOINT LIVES:—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	72			73			74	
Age of Male (x)	$\lambda\ D_{x,\,72}$	$\lambda\ N_{x,\,72}$	Age of Male (x)	$\lambda\ D_{x,\,73}$	$\lambda\ N_{x,\,73}$	Age of Male (x)	$\lambda\ D_{x,\,74}$	$\lambda\ N_{x,\,74}$
0	5·2823646	6·0391364	0	5·2439870	5·9840978	0	5·2028889	5·9261304
1	5·1983624	6·0112514	1	5·1599848	5·9555502	1	5·1188867	5·8968915
2	5·1630815	5·9946549	2	5·1247039	5·9386963	2	5·0836058	5·8797695
3	5·1409682	5·9815115	3	5·1025906	5·9254127	3	5·0614925	5·8663417
4	5·1240665	5·9699831	4	5·0856889	5·9138007	4	5·0445908	5·8546394
5	5·1098391	5·9594082	5	5·0714615	5·9031725	5	5·0303634	5·8439569
6	5·0974779	5·9494666	6	5·0591003	5·8932023	6	5·0180022	5·8339537
7	5·0863344	5·9399339	7	5·0479568	5·8836575	7	5·0068587	5·8243953
8	5·0759202	5·9306638	8	5·0375426	5·8743878	8	4·9964445	5·8151246
9	5·0661728	5·9215684	9	5·0277952	5·8653042	9	4·9866971	5·8060506
10	5·0569376	5·9125589	10	5·0185600	5·8563143	10	4·9774619	5·7970795
11	5·0480731	5·9035588	11	5·0096955	5·8473413	11	4·9685974	5·7881313
12	5·0394511	5·8945077	12	5·0010735	5·8383195	12	4·9599754	5·7791393
13	5·0309566	5·8853556	13	4·9925790	5·8291991	13	4·9514809	5·7700501
14	5·0224877	5·8760648	14	4·9841101	5·8199400	14	4·9430120	5·7608231
15	5·0139559	5·8666093	15	4·9755783	5·8105153	15	4·9344802	5·7514291
16	5·0052856	5·8569735	16	4·9669080	5·8009086	16	4·9258099	5·7418516
17	4·9964148	5·8471546	17	4·9580372	5·7911156	17	4·9169391	5·7320845
18	4·9872943	5·8371565	18	4·9489167	5·7811410	18	4·9078186	5·7221328
19	4·9778885	5·8269934	19	4·9395109	5·7709986	19	4·8984128	5·7120109
20	4·9681747	5·8166872	20	4·9297971	5·7607108	20	4·8886990	5·7017413
21	4·9581435	5·8062652	21	4·9197659	5·7503070	21	4·8786678	5·6913542
22	4·9480319	5·7957601	22	4·9096543	5·7398203	22	4·8685562	5·6808858
23	4·9378426	5·7851708	23	4·8994650	5·7292501	23	4·8583669	5·6703341
24	4·9275774	5·7744948	24	4·8891998	5·7185945	24	4·8481017	5·6596979
25	4·9172373	5·7637291	25	4·8788597	5·7078505	25	4·8377616	5·6489744
26	4·9068224	5·7528703	26	4·8684448	5·6970143	26	4·8273467	5·6381601
27	4·8963320	5·7419136	27	4·8579544	5·6860816	27	4·8168563	5·6272505
28	4·8857645	5·7308532	28	4·8473869	5·6750472	28	4·8062888	5·6162407
29	4·8751177	5·7196830	29	4·8367401	5·6639048	29	4·7956420	5·6051250
30	4·8643883	5·7083962	30	4·8260107	5·6526475	30	4·7849126	5·5938959
31	4·8535723	5·6969843	31	4·8151947	5·6412674	31	4·7740966	5·5825461
32	4·8426648	5·6854387	32	4·8042872	5·6297559	32	4·7631891	5·5710672
33	4·8316601	5·6737493	33	4·7932825	5·6181033	33	4·7521844	5·5594495
34	4·8205517	5·6619059	34	4·7821741	5·6062991	34	4·7410760	5·5476831
35	4·8093322	5·6498970	35	4·7709546	5·5943320	35	4·7298565	5·5357561
36	4·7979934	5·6377091	36	4·7596158	5·5821900	36	4·7185177	5·5236571
37	4·7865262	5·6253294	37	4·7481486	5·5698588	37	4·7070505	5·5113730
38	4·7749208	5·6127424	38	4·7365432	5·5573245	38	4·6954451	5·4988885
39	4·7631664	5·5999324	39	4·7247888	5·5445708	39	4·6836907	5·4861892
40	4·7512516	5·5868820	40	4·7128740	5·5315812	40	4·6717759	5·4732574
41	4·7391639	5·5735726	41	4·7007863	5·5183371	41	4·6596882	5·4600756
42	4·7268901	5·5599836	42	4·6885125	5·5048185	42	4·6474144	5·4466244
43	4·7144161	5·5460928	43	4·6760385	5·4910033	43	4·6349404	5·4328818
44	4·7017272	5·5318765	44	4·6633496	5·4768683	44	4·6222515	5·4188246
45	4·6888075	5·5173081	45	4·6504299	5·4623875	45	4·6093318	5·4044276
46	4·6756405	5·5023585	46	4·6372629	5·4475323	46	4·5961648	5·3896628
47	4·6622088	5·4869966	47	4·6238312	5·4322713	47	4·5827331	5·3744993
48	4·6484942	5·4711867	48	4·6101166	5·4165704	48	4·5690185	5·3589024
49	4·6344776	5·4548897	49	4·5961000	5·4003904	49	4·5550019	5·3428349
50	4·6201392	5·4380625	50	4·5817616	5·3836886	50	4·5406635	5·3262535
51	4·6054582	5·4206566	51	4·5670806	5·3664166	51	4·5259825	5·3091102
52	4·5901685	5·4026171	52	4·5517909	5·3485202	52	4·5106928	5·2913511
53	4·5744340	5·3839250	53	4·5360564	5·3299819	53	4·4949583	5·2729609
54	4·5582374	5·3645272	54	4·5198598	5·3107491	54	4·4787617	5·2538878

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Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of Female (y)	72			73			74	
Age of Male (x)	$\lambda D_{x,72}$	$\lambda N_{x,72}$	Age of Male (x)	$\lambda D_{x,73}$	$\lambda N_{x,73}$	Age of Male (x)	$\lambda D_{x,74}$	$\lambda N_{x,74}$
55	4·5415515	5·3443608	55	4·5031739	5·2907612	55	4·4620758	5·2340714
56	4·5243386	5·3233579	56	4·4859610	5·2699475	56	4·4448629	5·2134429
57	4·5065506	5·3014390	57	4·4681730	5·2482326	57	4·4270749	5·1919239
58	4·4881291	5·2785186	58	4·4497515	5·2255290	58	4·4086534	5·1694320
59	4·4690055	5·2545036	59	4·4306279	5·2017442	59	4·3895298	5·1458715
60	4·4491007	5·2292927	60	4·4107231	5·1767769	60	4·3696250	5·1211421
61	4·4283254	5·2027789	61	4·3899478	5·1505184	61	4·3488497	5·0951352
62	4·4065799	5·1748451	62	4·3682023	5·1228542	62	4·3271042	5·0677343
63	4·3837542	5·1453702	63	4·3453766	5·0936596	63	4·3042785	5·0388164
64	4·3597280	5·1142235	64	4·3213504	5·0628049	64	4·2802523	5·0082501
65	4·3343706	5·0812693	65	4·2959930	5·0301527	65	4·2548949	4·9758971
66	4·3075410	5·0463630	66	4·2691634	4·9955580	66	4·2280653	4·9416118
67	4·2790879	5·0093532	67	4·2407103	4·9588695	67	4·1996122	4·9052420
68	4·2488498	4·9700836	68	4·2104722	4·9199270	68	4·1693741	4·8666270
69	4·2166545	4·9283861	69	4·1782769	4·8785655	69	4·1371758	4·8255995
70	4·1823199	4·8840904	70	4·1439423	4·8346089	70	4·1028442	4·7819843
71	4·1456533	4·8370149	71	4·1072757	4·7878776	71	4·0661776	4·7355981
72	4·1064517	4·7869721	72	4·0680741	4·7381818	72	4·0269760	4·6862518
73	4·0645020	4·7337653	73	4·0261244	4·6853243	73	3·9850263	4·6337465
74	4·0195804	4·6771907	74	3·9812028	4·6290998	74	3·9401047	4·5778754
75	3·9714531	4·6170361	75	3·9330755	4·5692944	75	3·8919774	4·5184245
76	3·9198757	4·5530802	76	3·8814981	4·5056870	76	3·8404000	4·4551699
77	3·8645938	4·4850941	77	3·8262162	4·4380456	77	3·7851181	4·3878808
78	3·8053424	4·4128377	78	3·7669648	4·3661321	78	3·7258667	4·3163151
79	3·7418463	4·3360639	79	3·7034687	4·2896957	79	3·6623706	4·2402247
80	3·6738199	4·2545149	80	3·6354423	4·2084793	80	3·5943142	4·1593485
81	3·6009673	4·1679232	81	3·5625897	4·1222146	81	3·5211906	4·0734185
82	3·5229822	4·0760121	82	3·4846046	4·0306228	82	3·4435065	3·9821563
83	3·4395483	3·9784932	83	3·4011707	3·9334174	83	3·3600726	3·8852724
84	3·3503385	3·8750688	84	3·3119609	3·8302986	84	3·2708028	3·7824691
85	3·2550157	3·7654309	85	3·2166381	3·7209577	85	3·1755400	3·6734356
86	3·1532323	3·6492609	86	3·1148547	3·6050755	86	3·0737566	3·5578523
87	3·0446305	3·5262281	87	3·0062529	3·4823233	87	2·9651548	3·4353894
88	2·9288421	3·3959909	88	2·8904645	3·3523572	88	2·8493064	3·3057053
89	2·8054887	3·2581977	89	2·7671111	3·2148261	89	2·7260130	3·1684466
90	2·6741812	3·1124850	90	2·6358036	3·0693658	90	2·5947055	3·0232497
91	2·5345207	2·9584765	91	2·4961431	2·9156014	91	2·4550450	2·8697391
92	2·3860976	2·7957841	92	2·3477200	2·7531439	92	2·3066219	2·7075276
93	2·2284921	2·6240076	93	2·1901145	2·5815936	93	2·1490164	2·5362136
94	2·0612740	2·4427306	94	2·0228964	2·4005345	94	1·9817953	2·3553823
95	1·8840029	2·2515171	95	1·8456253	2·2095330	95	1·8045272	2·1646027
96	1·6962280	2·0499096	96	1·6578504	2·0081316	96	1·6167523	1·9634181
97	1·4974881	1·8374066	97	1·4591105	1·7958328	97	1·4180124	1·7513322
98	1·2873118	1·6134390	98	1·2489342	1·5720673	98	1·2078361	1·5277832
99	1·0652174	1·3772898	99	1·0268398	1·3361354	99	0·9857417	1·2920699
100	0·8307126	1·1279498	100	0·7923350	1·0870287	100	0·7512369	1·0432169
101	0·5832951	0·8637391	101	0·5449175	0·8230958	101	0·5038194	0·7795676
102	0·3224521	0·5814635	102	0·2840745	0·5411048	102	0·2429764	0·4979381
103	0·0476605	0·2736262	103	0·0092829	0·2337827	103	9·9681848	0·1911155
104	9·7583869	$\bar{1}$·9210098	104	9·7200093	$\bar{1}$·8817840	104	9·6789112	$\bar{1}$·8397922
105	9·4540875		105	9·4157099		105	9·3746118	
106	9·1342083		106	9·0958307		106	9·0547326	
107	8·7981849		107	8·7598073		107	8·7187002	
108	8·4454426		108	8·4070650		108	8·3659669	
109	8·0753963		109	8·0370187		109	7·9959206	

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	75		76			77		
Age of Male (x)	λ $D_{x,\,75}$	λ $N_{x,\,75}$	Age of Male (x)	λ $D_{x,\,76}$	λ $N_{x,\,76}$	Age of Male (x)	λ $D_{x,\,77}$	λ $N_{x,\,77}$
0	5·1588473	5·8650400	0	5·1116284	5·8006216	0	5·0609876	5·7326607
1	5·0748451	5·8350821	1	5·0276262	5·7699169	1	4·9769854	5·7011811
2	5·0395642	5·8176810	2	4·9923453	5·7522274	2	4·9417045	5·6831941
3	5·0174509	5·8041026	3	4·9702320	5·7384930	3	4·9195912	5·6692983
4	5·0005492	5·7923083	4	4·9533303	5·7266013	4	4·9026895	5·6573064
5	4·9863218	5·7815656	5	4·9391029	5·7157975	5	4·8884621	5·6464373
6	4·9739606	5·7715291	6	4·9267417	5·7057237	6	4·8761009	5·6363244
7	4·9628171	5·7619536	7	4·9155982	5·6961293	7	4·8649574	5·6267084
8	4·9524029	5·7526797	8	4·9051840	5·6868503	8	4·8545432	5·6174224
9	4·9426555	5·7436142	9	4·8954366	5·6777914	9	4·8447958	5·6083687
10	4·9334203	5·7346607	10	4·8862014	5·6688542	10	4·8355606	5·5994461
11	4·9245558	5·7257367	11	4·8773369	5·6599536	11	4·8266961	5·5905677
12	4·9159338	5·7167735	12	4·8687149	5·6510183	12	4·8180741	5·5816599
13	4·9074393	5·7077155	13	4·8602204	5·6419912	13	4·8095796	5·5726627
14	4·8989704	5·6985200	14	4·8517515	5·6328272	14	4·8011107	5·5635302
15	4·8904386	5·6891570	15	4·8432197	5·6234948	15	4·7925789	5·5542284
16	4·8817683	5·6796082	16	4·8345494	5·6139749	16	4·7839086	5·5447371
17	4·8728975	5·6698674	17	4·8256786	5·6042597	17	4·7750378	5·5350481
18	4·8637770	5·6599385	18	4·8165581	5·5943539	18	4·7659173	5·5251644
19	4·8543712	5·6498364	19	4·8071523	5·5842713	19	4·7565115	5·5151015
20	4·8446574	5·6395846	20	4·7974385	5·5740366	20	4·7467977	5·5048834
21	4·8346262	5·6292142	21	4·7874073	5·5636822	21	4·7367665	5·4945441
22	4·8245146	5·6187624	22	4·7772957	5·5532469	22	4·7266549	5·4841246
23	4·8143253	5·6082288	23	4·7671064	5·5427301	23	4·7164656	5·4736243
24	4·8040601	5·5976111	24	4·7568412	5·5321307	24	4·7062004	5·4630417
25	4·7937200	5·5869073	25	4·7465011	5·5214454	25	4·6958603	5·4523747
26	4·7833051	5·5761139	26	4·7360862	5·5106718	26	4·6854454	5·4416199
27	4·7728147	5·5652265	27	4·7255958	5·4998057	27	4·6749550	5·4307738
28	4·7622472	5·5542402	28	4·7150283	5·4888421	28	4·6643875	5·4198319
29	4·7516004	5·5431494	29	4·7043815	5·4777753	29	4·6537407	5·4087881
30	4·7408710	5·5319476	30	4·6936521	5·4665989	30	4·6430113	5·3976363
31	4·7300550	5·5206268	31	4·6828361	5·4553059	31	4·6321953	5·3863693
32	4·7191475	5·5091788	32	4·6719286	5·4438875	32	4·6212878	5·3749794
33	4·7081428	5·4975947	33	4·6609239	5·4323352	33	4·6102831	5·3634572
34	4·6970344	5·4858639	34	4·6498155	5·4206387	34	4·5991747	5·3517932
35	4·6858149	5·4739759	35	4·6385960	5·4087871	35	4·5879552	5·3399769
36	4·6744761	5·4619181	36	4·6272572	5·3967691	36	4·5766164	5·3279961
37	4·6630089	5·4496780	37	4·6157900	5·3845713	37	4·5651492	5·3158392
38	4·6514035	5·4372420	38	4·6041846	5·3721805	38	4·5535438	5·3034915
39	4·6396491	5·4245937	39	4·5924302	5·3595819	39	4·5417894	5·2909392
40	4·6277343	5·4117178	40	4·5805154	5·3467586	40	4·5298746	5·2781670
41	4·6156466	5·3985954	41	4·5684277	5·3336936	41	4·5177869	5·2651559
42	4·6033728	5·3852082	42	4·5561539	5·3203675	42	4·5055131	5·2518888
43	4·5908988	5·3715350	43	4·5436799	5·3067600	43	4·4930391	5·2383442
44	4·5782099	5·3575526	44	4·5309910	5·2928491	44	4·4803502	5·2245010
45	4·5652902	5·3432358	45	4·5180713	5·2786091	45	4·4674305	5·2103346
46	4·5521232	5·3285574	46	4·5049043	5·2640134	46	4·4542635	5·1958178
47	4·5386915	5·3134870	47	4·4914726	5·2490320	47	4·4408318	5·1809214
48	4·5249769	5·2979904	48	4·4777580	5·2336314	48	4·4271172	5·1656126
49	4·5109603	5·2820300	49	4·4637414	5·2177742	49	4·4131006	5·1498541
50	4·4966219	5·2655645	50	4·4494030	5·2014184	50	4·3987622	5·1336044
51	4·4819409	5·2485449	51	4·4347220	5·1845177	51	4·3840812	5·1168158
52	4·4666512	5·2309175	52	4·4194323	5·1670168	52	4·3687915	5·0994362
53	4·4509167	5·2126696	53	4·4036978	5·1489051	53	4·3530570	5·0814553
54	4·4347201	5·1937499	54	4·3875012	5·1301329	54	4·3368604	5·0628241

JOINT LIVES:—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	75			76			77	
Age of Male (x)	λ $D_{x,\,75}$	λ $N_{x,\,75}$	Age of Male (x)	λ $D_{x,\,76}$	λ $N_{x,\,76}$	Age of Male (x)	λ $D_{x,\,77}$	λ $N_{x,\,77}$
55	4·4180342	5·1740991	55	4·3708153	5·1106412	55	4·3201745	5·0434853
56	4·4008213	5·1536485	56	4·3536024	5·0903625	56	4·3029616	5·0233718
57	4·3830333	5·1323218	57	4·3358144	5·0692203	57	4·2851736	5·0024077
58	4·3646118	5·1100325	58	4·3173929	5·0471303	58	4·2667521	4·9805088
59	4·3454882	5·0866912	59	4·2982693	5·0239985	59	4·2476285	4·9575833
60	4·3255834	5·0621938	60	4·2783645	4·9997276	60	4·2277237	4·9335283
61	4·3048081	5·0364321	61	4·2575892	4·9742053	61	4·2069484	4·9082399
62	4·2830626	5·0092903	62	4·2358437	4·9473161	62	4·1852029	4·8815969
63	4·2602369	4·9806437	63	4·2130180	4·9189352	63	4·1623772	4·8534762
64	4·2362107	4·9503610	64	4·1889918	4·8889317	64	4·1383510	4·8237448
65	4·2108533	4·9183035	65	4·1636344	4·8571648	65	4·1129936	4·7922635
66	4·1840237	4·8843245	66	4·1368048	4·8234880	66	4·0861640	4·7588839
67	4·1555706	4·8482704	67	4·1083517	4·7877466	67	4·0577109	4·7234508
68	4·1253325	4·8099810	68	4·0781136	4·7497789	68	4·0274728	4·6858017
69	4·0931372	4·7692865	69	4·0459183	4·7094158	69	3·9952775	4·6457659
70	4·0588026	4·7250112	70	4·0115837	4·6664786	70	3·9609429	4·6031656
71	4·0221360	4·6799718	71	3·9749171	4·6207846	71	3·9242763	4·5578144
72	3·9829344	4·6309758	72	3·9357155	4·5721391	72	3·8850747	4·5095185
73	3·9409847	4·5788245	73	3·8937658	4·5203424	73	3·8431250	4·4580764
74	3·8960631	4·5233098	74	3·8488442	4·4651859	74	3·7982034	4·4032777
75	3·8479358	4·4642161	75	3·8007169	4·4064523	75	3·7500761	4·3449053
76	3·7963584	4·4013198	76	3·7491395	4·3439159	76	3·6984987	4·2827318
77	3·7410765	4·3343866	77	3·6938576	4·2773438	77	3·6432168	4·2165220
78	3·6818251	4·2631761	78	3·6346062	4·2064916	78	3·5839654	4·1460328
79	3·6183290	4·1874358	79	3·5711101	4·1311087	79	3·5204693	4·0710100
80	3·5503026	4·1069079	80	3·5030837	4·0509328	80	3·4524429	3·9911929
81	3·4774500	4·0213204	81	3·4302311	3·9656950	81	3·3795903	3·9063081
82	3·3994649	3·9303947	82	3·3522460	3·8751134	82	3·3016052	3·8160768
83	3·3160310	3·8338417	83	3·2688121	3·7788984	83	3·2181713	3·7202064
84	3·2268212	3·7313615	84	3·1796023	3·6767494	84	3·1289615	3·6183965
85	3·1314984	3·6226450	85	3·0842795	3·5683566	85	3·0336387	3·5103345
86	3·0297150	3·5073701	86	2·9824961	3·4533993	86	2·9318553	3·3957025
87	2·9211132	3·3852068	87	2·8738943	3·3315451	87	2·8232535	3·2741652
88	2·8053248	3·2558136	88	2·7581059	3·2024524	88	2·7074651	3·1453814
89	2·6819714	3·1188376	89	2·6347525	3·0657675	89	2·5841117	3·0089969
90	2·5506639	2·9739140	90	2·5034450	2·9211270	90	2·4528042	2·8646475
91	2·4110034	2·8206677	91	2·3637845	2·7681547	91	2·3131437	2·7119582
92	2·2625803	2·6587114	92	2·2153614	2·6064631	92	2·1647206	2·5505402
93	2·1049748	2·4876445	93	2·0577559	2·4356533	93	2·0071151	2·3799940
94	1·9377567	2·3070521	94	1·8905378	2·2553078	94	1·8398970	2·1999074
95	1·7604856	2·1165028	95	1·7132667	2·0650006	95	1·6626259	2·0098490
96	1·5727107	1·9155428	96	1·5254918	1·8642737	96	1·4748510	1·8093684
97	1·3739708	1·7036808	97	1·3267519	1·6526427	97	1·2761111	1·5979748
98	1·1637945	1·4803562	98	1·1165756	1·4295536	98	1·0659348	1·3751275
99	0·9417001	1·2448805	99	0·8944812	1·1943228	99	0·8438404	1·1401528
100	0·7071953	0·9962752	100	0·6599764	0·9459902	100	0·6093356	0·8921002
101	0·4597778	0·7329403	101	0·4125589	0·6829569	101	0·3619181	0·6294096
102	0·1989348	0·4516043	102	0·1517159	0·4021238	102	0·1010751	0·3489665
103	9·9241432	0·1453518	103	9·8769243	0·0963538	103	9·8262835	0·0437944
104	9·6348696	1̄·7947668	104	9·5876507	1̄·7464785	104	9·5370099	1̄·6947806
105	9·3305702		105	9·2833513		105	9·2327105	
106	9·0106910		106	8·9634721		106	8·9128313	
107	8·6746676		107	8·6274487		107	8·5768079	
108	8·3219253		108	8·2747064		108	8·2240656	
109	7·9518790		109	7·9046601		109	7·8540193	

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	78		79			80		
Age of Male (x)	λ $D_{x,\,78}$	λ $N_{x,\,78}$	Age of Male (x)	λ $D_{x,\,79}$	λ $N_{x,\,79}$	Age of Male (x)	λ $D_{x,\,80}$	λ $N_{x,\,80}$
0	5·0066690	5·6609290	0	4·9484061	5·5851920	0	4·8859213	5·5051990
1	4·9226668	5·6286491	1	4·8644039	5·5520837	1	4·8019191	5·4712378
2	4·8873859	5·6103551	2	4·8291230	5·5334746	2	4·7666382	5·4523047
3	4·8652726	5·5962938	3	4·8070097	5·5192432	3	4·7445249	5·4378997
4	4·8483709	5·5841976	4	4·7901080	5·5070403	4	4·7276232	5·4255867
5	4·8341435	5·5732612	5	4·7758806	5·4960331	5	4·7133958	5·4145071
6	4·8217823	5·5631060	6	4·7635194	5·4858340	6	4·7010346	5·4042611
7	4·8106388	5·5534669	7	4·7523759	5·4761692	7	4·6898911	5·3945692
8	4·8002246	5·5441714	8	4·7419617	5·4668627	8	4·6794769	5·3852494
9	4·7904772	5·5351212	9	4·7322143	5·4578137	9	4·6697295	5·3762006
10	4·7812420	5·5262121	10	4·7229791	5·4489167	10	4·6604943	5·3673134
11	4·7723775	5·5173546	11	4·7141146	5·4400792	11	4·6516298	5·3584949
12	4·7637555	5·5084732	12	4·7054926	5·4312232	12	4·6430078	5·3496637
13	4·7552610	5·4995060	13	4·6969981	5·4222850	13	4·6345133	5·3407534
14	4·7467921	5·4904041	14	4·6885292	5·4132138	14	4·6260444	5·3317123
15	4·7382603	5·4811330	15	4·6799974	5·4039727	15	4·6175126	5·3225015
16	4·7295900	5·4716703	16	4·6713271	5·3945387	16	4·6088423	5·3130953
17	4·7207192	5·4620069	17	4·6624563	5·3849009	17	4·5999715	5·3034834
18	4·7115987	5·4521459	18	4·6533358	5·3750620	18	4·5908510	5·2936664
19	4·7021929	5·4421015	19	4·6439300	5·3650366	19	4·5814452	5·2836594
20	4·6924791	5·4319000	20	4·6342162	5·3548504	20	4·5717314	5·2734888
21	4·6824479	5·4215753	21	4·6241850	5·3445403	21	4·5617002	5·2631916
22	4·6723363	5·4111707	22	4·6140734	5·3341503	22	4·5515886	5·2528159
23	4·6621470	5·4006864	23	4·6038841	5·3236801	23	4·5413993	5·2423605
24	4·6518818	5·3901200	24	4·5936189	5·3131300	24	4·5311341	5·2318243
25	4·6415417	5·3794700	25	4·5832788	5·3024964	25	4·5207940	5·2212068
26	4·6311268	5·3687336	26	4·5728639	5·2917770	26	4·5103791	5·2105039
27	4·6206364	5·3579067	27	4·5623735	5·2809685	27	4·4998887	5·1997130
28	4·6100689	5·3469850	28	4·5518060	5·2700662	28	4·4893212	5·1888292
29	4·5994221	5·3359633	29	4·5411592	5·2590651	29	4·4786744	5·1778478
30	4·5886927	5·3248347	30	4·5304298	5·2479592	30	4·4679450	5·1667627
31	4·5778767	5·3135929	31	4·5196138	5·2367410	31	4·4571290	5·1555677
32	4·5669692	5·3022296	32	4·5087063	5·2254033	32	4·4462215	5·1442540
33	4·5559645	5·2907365	33	4·4977016	5·2139375	33	4·4352168	5·1328144
34	4·5448561	5·2791034	34	4·4865932	5·2023341	34	4·4241084	5·1212388
35	4·5336366	5·2673203	35	4·4753737	5·1905824	35	4·4128889	5·1095175
36	4·5222978	5·2553755	36	4·4640349	5·1786720	36	4·4015501	5·0976390
37	4·5108306	5·2432566	37	4·4525677	5·1665897	37	4·3900829	5·0855921
38	4·4992252	5·2309509	38	4·4409623	5·1543229	38	4·3784775	5·0733623
39	4·4874708	5·2184431	39	4·4292079	5·1418578	39	4·3667231	5·0609372
40	4·4755560	5·2057180	40	4·4172931	5·1291783	40	4·3548083	5·0483016
41	4·4634683	5·1927594	41	4·4052054	5·1162679	41	4·3427206	5·0354381
42	4·4511945	5·1795475	42	4·3929316	5·1031100	42	4·3304468	5·0223294
43	4·4387205	5·1660635	43	4·3804576	5·0896826	43	4·3179728	5·0089577
44	4·4260316	5·1522846	44	4·3677687	5·0759661	44	4·3052839	4·9952991
45	4·4131119	5·1381880	45	4·3548490	5·0619359	45	4·2923642	4·9813324
46	4·3999449	5·1237472	46	4·3416820	5·0475665	46	4·2791972	4·9670315
47	4·3865132	5·1089318	47	4·3282503	5·0328294	47	4·2657655	4·9523681
48	4·3727986	5·0937106	48	4·3145357	5·0176914	48	4·2520509	4·9373102
49	4·3587820	5·0780463	49	4·3005191	5·0021172	49	4·2380343	4·9218217
50	4·3444436	5·0618980	50	4·2861807	4·9860651	50	4·2236959	4·9058617
51	4·3297626	5·0452177	51	4·2714997	4·9694886	51	4·2090149	4·8893835
52	4·3144729	5·0279524	52	4·2562100	4·9523332	52	4·1937252	4·8723328
53	4·2987384	5·0100967	53	4·2404755	4·9345954	53	4·1779907	4·8547085
54	4·2825418	4·9916008	54	4·2242789	4·9162296	54	4·1617941	4·8364647

JOINT LIVES:—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of Female (y)	78		79			80		
Age of Male (x)	λ $D_{x,78}$	λ $N_{x,78}$	Age of Male (x)	λ $D_{x,79}$	λ $N_{x,79}$	Age of Male (x)	λ $D_{x,80}$	λ $N_{x,80}$
55	4·2658559	4·9724083	55	4·2075930	4·8971767	55	4·1451082	4·8175468
56	4·2486430	4·9524529	56	4·1903801	4·8773736	56	4·1278953	4·7978877
57	4·2308550	4·9316602	57	4·1725921	4·8567446	57	4·1101073	4·7774174
58	4·2124335	4·9099458	58	4·1541706	4·8352079	58	4·0916858	4·7560501
59	4·1933099	4·8872183	59	4·1350470	4·8126708	59	4·0725622	4·7336963
60	4·1734051	4·8633764	60	4·1151422	4·7890332	60	4·0526574	4·7102562
61	4·1526298	4·8383100	61	4·0943669	4·7641874	61	4·0318821	4·6856209
62	4·1308843	4·8119087	62	4·0726214	4·7380127	62	4·0101366	4·6596738
63	4·1080586	4·7840407	63	4·0497957	4·7103941	63	3·9873109	4·6322865
64	4·0840324	4·7545762	64	4·0257695	4·6811887	64	3·9632847	4·6033374
65	4·0586750	4·7233736	65	4·0004121	4·6502589	65	3·9379273	4·5726728
66	4·0318454	4·6902856	66	3·9735825	4·6174558	66	3·9110977	4·5401481
67	4·0033923	4·6551558	67	3·9451294	4·5826230	67	3·8826446	4·5056056
68	3·9731542	4·6178200	68	3·9148913	4·5455960	68	3·8524065	4·4688809
69	3·9409589	4·5781081	69	3·8826960	4·5062024	69	3·8202112	4·4298006
70	3·9066243	4·5358400	70	3·8483614	4·4642627	70	3·7858766	4·3881834
71	3·8699577	4·4908294	71	3·8116948	4·4195886	71	3·7492100	4·3438415
72	3·8307561	4·4428810	72	3·7724932	4·3719844	72	3·7100084	4·2965770
73	3·7888064	4·3917917	73	3·7305435	4·3212460	73	3·6680587	4·2461861
74	3·7438848	4·3373510	74	3·6856219	4·2671609	74	3·6231371	4·1924545
75	3·6957575	4·2793391	75	3·6374946	4·2095094	75	3·5750098	4·1351606
76	3·6441801	4·2175292	76	3·5859172	4·1480620	76	3·5234324	4·0740753
77	3·5888982	4·1516841	77	3·5306353	4·0825822	77	3·4681505	4·0089590
78	3·5296468	4·0815591	78	3·4713839	4·0128234	78	3·4088991	3·9395662
79	3·4661507	4·0069006	79	3·4078878	3·9385292	79	3·3454030	3·8656393
80	3·3981243	3·9274443	80	3·3398614	3·8594379	80	3·2773766	3·7869125
81	3·3252717	3·8429192	81	3·2670088	3·7752739	81	3·2045240	3·7031133
82	3·2472866	3·7530412	82	3·1890237	3·6857560	82	3·1265389	3·6139549
83	3·1638527	3·6575215	83	3·1055898	3·5905889	83	3·0431050	3·5191478
84	3·0746429	3·5560564	84	3·0163800	3·4894734	84	2·9538952	3·4183845
85	2·9793201	3·4483337	85	2·9210572	3·3820947	85	2·8585724	3·3113542
86	2·8775367	3·3340319	86	2·8192738	3·2681311	86	2·7567890	3·1977325
87	2·7689349	3·2128189	87	2·7106720	3·1472484	87	2·6481872	3·0771866
88	2·6531465	3·0843515	88	2·5948836	3·0191039	88	2·5323988	2·9493705
89	2·5297931	2·9482750	89	2·4715302	2·8833428	89	2·4090454	2·8139311
90	2·3984856	2·8042253	90	2·3402227	2·7396001	90	2·2777379	2·6705019
91	2·2588251	2·6518263	91	2·2005622	2·5874999	91	2·1380774	2·5187073
92	2·1104020	2·4906915	92	2·0521391	2·4266544	92	1·9896543	2·3581583
93	1·9527965	2·3204190	93	1·8945336	2·2566636	93	1·8320488	2·1884560
94	1·7855784	2·1425973	94	1·7273155	2·0771152	94	1·6648307	2·0091884
95	1·6083073	1·9507970	95	1·5500444	1·8875807	95	1·4875596	1·8199274
96	1·4205324	1·7505678	96	1·3622695	1·6876110	96	1·2997847	1·6202246
97	1·2217925	1·5394274	97	1·1635296	1·4767273	97	1·1010448	1·4096035
98	1·0116162	1·3168255	98	0·9533533	1·2543910	98	0·8908685	1·1875320
99	0·7895218	1·0821101	99	0·7312589	1·0199343	99	0·6687741	0·9533682
100	0·5550170	0·8343508	100	0·4967541	0·7724684	100	0·4342693	0·7061885
101	0·3075995	0·5719998	101	0·2493366	0·5104914	101	0·1868518	0·4445600
102	0·0467565	0·2920344	102	9·9884936	0·2309596	102	9·9260088	0·1655411
103	9·7719649	$\bar{1}$·9873981	103	9·7137020	$\bar{1}$·9270109	103	9·6512172	$\bar{1}$·8621910
104	9·4826913	$\bar{1}$·6392872	104	9·4244284	$\bar{1}$·5796693	104	9·3619436	$\bar{1}$·5158738
105	9·1783919		105	9·1201290		105	9·0576442	
106	8·8585127		106	8·8002498		106	8·7377650	
107	8·5224893		107	8·4642264		107	8·4017416	
108	8·1697470		108	8·1114841		108	8·0489993	
109	7·7997007		109	7·7414378		109	7·6789530	

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x, y}$ and $N_{x, y}$.

Age of Female (y)	81			82			83	
Age of Male (x)	λ $D_{x, 81}$	λ $N_{x, 81}$	Age of Male (x)	λ $D_{x, 82}$	λ $N_{x, 82}$	Age of Male (x)	λ $D_{x, 83}$	λ $N_{x, 83}$
0	4·8189261	5·4206910	0	4·7471210	5·3313953	0	4·6701957	5·2370290
1	4·7349239	5·3858511	1	4·6631188	5·2956537	1	4·5861935	5·2003622
2	4·6996430	5·3665875	2	4·6278379	5·2760515	2	4·5509126	5·1804158
3	4·6775297	5·3520042	3	4·6057246	5·2612881	3	4·5287993	5·1654681
4	4·6606280	5·3395797	4	4·5888229	5·2487482	4	4·5118976	5·1528129
5	4·6464006	5·3284247	5	4·5745955	5·2375174	5	4·4976702	5·1415027
6	4·6340394	5·3181308	6	4·5622343	5·2271727	6	4·4853090	5·1311075
7	4·6228959	5·3084086	7	4·5510908	5·2174200	7	4·4741655	5·1213212
8	4·6124817	5·2990746	8	4·5406766	5·2080681	8	4·4637513	5·1119514
9	4·6027343	5·2900235	9	4·5309292	5·1990143	9	4·4540039	5·1028914
10	4·5934991	5·2811456	10	4·5216940	5·1901434	10	4·4447687	5·0940272
11	4·5846346	5·2723436	11	4·5128295	5·1813582	11	4·4359042	5·0852560
12	4·5760126	5·2635364	12	4·5042075	5·1725723	12	4·4272822	5·0764924
13	4·5675181	5·2546539	13	4·4957130	5·1637170	13	4·4187877	5·0676619
14	4·5590492	5·2456419	14	4·4872441	5·1547343	14	4·4103188	5·0587077
15	4·5505174	5·2364607	15	4·4787123	5·1455817	15	4·4017870	5·0495843
16	4·5418471	5·2270831	16	4·4700420	5·1362321	16	4·3931167	5·0402617
17	4·5329763	5·2174961	17	4·4611712	5·1266706	17	4·3842459	5·0307256
18	4·5238558	5·2077014	18	4·4520507	5·1168972	18	4·3751254	5·0209737
19	4·5144500	5·1977124	19	4·4426449	5·1069266	19	4·3657196	5·0110204
20	4·5047362	5·1875565	20	4·4329311	5·0967854	20	4·3560058	5·0008937
21	4·4947050	5·1772729	21	4·4228999	5.0865136	21	4·3459746	4·9906341
22	4·4845934	5·1669097	22	4·4127883	5·0761638	22	4·3358630	4·9802957
23	4·4744041	5·1564683	23	4·4025990	5·0657347	23	4·3256737	4·9698798
24	4·4641389	5·1459469	24	4·3923338	5·0552269	24	4·3154085	4·9593844
25	4·4537988	5·1353432	25	4·3819937	5·0446382	25	4·3050684	4·9488089
26	4·4433839	5·1246568	26	4·3715788	5·0339655	26	4·2946535	4·9381513
27	4·4328935	5·1138821	27	4·3610884	5·0232077	27	4·2841631	4·9274068
28	4·4223260	5·1030162	28	4·3505209	5·0123581	28	4·2735956	4·9165745
29	4·4116792	5·0920536	29	4·3398741	5·0014135	29	4·2629488	4·9056464
30	4·4009498	5·0809884	30	4·3291447	4·9903677	30	4·2522194	4·8946190
31	4·3901338	5·0698145	31	4·3183287	4·9792137	31	4·2414034	4·8834848
32	4·3792263	5·0585248	32	4·3074212	4·9679451	32	4·2304959	4·8722367
33	4·3682216	5·0471093	33	4·2964165	4·9565545	33	4·2194912	4·8608672
34	4·3571132	5·0355606	34	4·2853081	4·9450301	34	4·2083828	4·8493684
35	4·3458937	5·0238675	35	4·2740886	4·9333648	35	4·1971633	4·8377279
36	4·3345549	5·0120202	36	4·2627498	4·9215460	36	4·1858245	4·8259374
37	4·3230877	5·0000056	37	4·2512826	4·9095635	37	4·1743573	4·8139837
38	4·3114823	4·9878124	38	4·2396772	4·8974033	38	4·1627519	4·8018563
39	4·2997279	4·9754249	39	4·2279228	4·8850529	39	4·1509975	4·7895398
40	4·2878131	4·9628299	40	4·2160080	4·8724966	40	4·1390827	4·7770213
41	4·2757254	4·9500118	41	4·2039203	4·8597194	41	4·1269950	4·7642838
42	4·2634516	4·9369508	42	4·1916465	4·8467051	42	4·1147212	4·7513114
43	4·2509776	4·9236294	43	4·1791725	4·8334327	43	4·1022472	4·7380866
44	4·2382887	4·9100280	44	4·1664836	4·8198827	44	4·0895583	4·7245871
45	4·2253690	4·8961210	45	4·1535639	4·8060347	45	4·0766386	4·7107916
46	4·2122020	4·8818855	46	4·1403969	4·7918604	46	4·0634716	4·6966779
47	4·1987703	4·8672925	47	4·1269652	4·7773348	47	4·0500399	4·6822146
48	4·1850557	4·8523104	48	4·1132506	4·7624250	48	4·0363253	4·6673745
49	4·1710391	4·8369036	49	4·0992340	4·7470963	49	4·0223087	4·6521196
50	4·1567007	4·8210318	50	4·0848956	4·7313075	50	4·0079703	4·6364106
51	4·1420197	4·8046471	51	4·0702146	4·7150125	51	3·9932893	4·6202001
52	4·1267300	4·7876956	52	4·0549249	4·6981554	52	3·9779996	4·6034331
53	4·1109955	4·7701795	53	4·0391904	4·6807415	53	3·9622651	4·5861164
54	4·0947989	4·7520530	54	4·0229938	4·6627257	54	3·9460685	4·5682068

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of **Female** (*y*)	81			82			83	
Age of **Male** (*x*)	λ $D_{x,81}$	λ $N_{x,81}$	**Age** of **Male** (*x*)	λ $D_{x,82}$	λ $N_{x,82}$	**Age** of **Male** (*x*)	λ $D_{x,83}$	λ $N_{x,83}$
55	4·0781130	4·7332615	55	4·0063079	4·6440563	55	3·9293826	4·5496521
56	4·0609001	4·7137425	56	3·9890950	4·6246686	56	3·9121697	4·5303901
57	4·0431121	4·6934209	57	3·9713070	4·6044916	57	3·8943817	4·5103501
58	4·0246906	4·6722180	58	3·9528855	4·5834436	58	3·8759602	4·4894509
59	4·0055670	4·6500403	59	3·9337619	4·5614348	59	3·8568366	4·4676034
60	3·9856622	4·6267892	60	3·9138571	4·5383659	60	3·8369318	4·4447087
61	3·9648869	4·6023574	61	3·8930818	4·5141290	61	3·8161565	4·4206593
62	3·9431414	4·5766273	62	3·8713363	4·4886084	62	3·7944110	4·3953394
63	3·9203157	4·5494745	63	3·8485106	4·4616782	63	3·7715853	4·3686241
64	3·8962895	4·5207597	64	3·8244844	4·4332054	64	3·7475591	4·3403797
65	3·8709321	4·4903585	65	3·7991270	4·4030411	65	3·7222017	4·3104645
66	3·8441025	4·4581045	66	3·7722974	4·3710577	66	3·6953721	4·2787186
67	3·8156494	4·4238458	67	3·7438443	4·3370745	67	3·6669190	4·2450135
68	3·7854113	4·3874161	68	3·7136062	4·3009334	68	3·6366809	4·2091522
69	3·7532160	4·3486427	69	3·6814109	4·2624592	69	3·6044856	4·1709704
70	3·7188814	4·3073429	70	3·6470763	4·2214700	70	3·5701510	4·1302842
71	3·6822148	4·2633271	71	3·6104097	4·1777751	71	3·5334844	4·0869031
72	3·6430132	4·2163981	72	3·5712081	4·1311752	72	3·4942828	4·0406269
73	3·6010635	4·1663493	73	3·5292584	4·0814643	73	3·4523331	3·9912473
74	3·5561419	4·1129675	74	3·4843368	4·0284265	74	3·4074115	3·9385492
75	3·5080146	4·0560289	75	3·4362095	3·9718392	75	3·3592842	3·8823071
76	3·4564372	3·9953026	76	3·3846321	3·9114693	76	3·3077068	3·8222897
77	3·4011553	3·9305492	77	3·3293502	3·8470758	77	3·2524249	3·7582524
78	3·3419039	3·8615201	78	3·2700988	3·7784095	78	3·1931735	3·6899460
79	3·2784078	3·7879597	79	3·2066027	3·7052126	79	3·1296774	3·6171115
80	3·2103814	3·7095998	80	3·1385763	3·6272183	80	3·0616510	3·5394801
81	3·1375288	3·6261637	81	3·0657237	3·5441487	81	2·9887984	3·4567743
82	3·0595437	3·5373707	82	2·9877386	3·4557178	82	2·9108133	3·3687069
83	2·9761098	3·4429219	83	2·9043047	3·3616307	83	2·8273794	3·2749823
84	2·8869000	3·3425155	84	2·8150949	3·2615830	84	2·7381696	3·1752929
85	2·7915772	3·2358367	85	2·7197721	3·1552583	85	2·6428468	3·0693251
86	2·6897938	3·1225615	86	2·6179887	3·0423326	86	2·5410634	2·9567503
87	2·5811920	3·0023558	87	2·5093869	2·9224706	87	2·4324616	2·8372348
88	2·4654036	2·8748747	88	2·3935985	2·7953273	88	2·3166732	2·7104322
89	2·3420502	2·7397614	89	2·2702451	2·6605468	89	2·1933198	2·5759864
90	2·2107427	2·5966521	90	2·1389376	2·5177605	90	2·0620123	2·4335298
91	2·0710822	2·4451681	91	1·9992771	2·3665937	91	1·9223518	2·2826824
92	1·9226591	2·2849232	92	1·8508540	2·2066570	92	1·7739287	2·1230597
93	1·7650536	2·1155153	93	1·6932485	2·0375508	93	1·6163232	1·9542594
94	1·5978355	1·9365338	94	1·5260304	1·8588613	94	1·4491051	1·7758696
95	1·4205644	1·7475524	95	1·3487593	1·6701642	95	1·2718340	1·5874618
96	1·2327895	1·5481252	96	1·1609844	1·4710158	96	1·0840591	1·3885967
97	1·0340496	1·3377746	97	0·9622445	1·2609439	97	0·8853192	1·1788043
98	0·8238733	1·1159731	98	0·7520682	1·0394220	98	0·6751429	0·9575690
99	0·6017789	0·8820917	99	0·5299738	0·8058270	99	0·4530485	0·7242677
100	0·3672741	0·6352525	100	0·2954690	0·5593080	100	0·2185437	0·4780757
101	0·1198566	0·3739597	101	0·0480515	0·2984382	101	9·9711262	0·2175892
102	9·8590136	0·0954135	102	9·7872085	0·0203198	102	9·7102832	$\bar{1}$·9400680
103	9·5842220	$\bar{1}$·7928118	103	9·5124169	$\bar{1}$·7184186	103	9·4354916	$\bar{1}$·6387887
104	9·2949484	$\bar{1}$·4474681	104	9·2231433	$\bar{1}$·3741983	104	9·1462180	$\bar{1}$·2955671
105	8·9906490		105	8·9188439		105	8·8419186	
106	8·6707698		106	8·5989647		106	8·5220394	
107	8·3347464		107	8·2629413		107	8·1860160	
108	7·9820041		108	7·9101990		108	7·8332737	
109	7·6119578		109	7·5401527		109	7·4632274	

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	84		85			86		
Age of Male (x)	$\lambda\ D_{x,\,84}$	$\lambda\ N_{x,\,84}$	Age of Male (x)	$\lambda\ D_{x,\,85}$	$\lambda\ N_{x,\,85}$	Age of Male (x)	$\lambda\ D_{x,\,86}$	$\lambda\ N_{x,\,86}$
0	4·5873287	5·1372965	0	4·4996880	5·0318899	0	4·4054301	4·9204891
1	4·5038205	5·0996830	1	4·4156858	4·9933097	1	4·3214279	4·8809228
2	4·4685456	5·0793861	2	4·3804049	4·9726568	2	4·2861470	4·8599101
3	4·4464323	5·0642525	3	4·3582916	4·9573353	3	4·2640337	4·8443989
4	4·4295306	5·0514786	4	4·3413899	4·9444422	4	4·2471320	4·8313866
5	4·4153032	5·0400898	5	4·3271625	4·9329717	5	4·2329046	4·8198341
6	4·4029420	5·0296406	6	4·3148013	4·9224695	6	4·2205434	4·8092755
7	4·3917985	5·0198210	7	4·3036578	4·9126136	7	4·2093999	4·7993840
8	4·3813843	5·0104306	8	4·2932436	4·9032024	8	4·1989857	4·7899493
9	4·3716369	5·0013641	9	4·2834962	4·8941271	9	4·1892383	4·7808650
10	4·3624017	4·9925031	10	4·2742610	4·8852696	10	4·1800031	4·7720083
11	4·3535372	4·9837462	11	4·2653965	4·8765232	11	4·1711386	4·7632730
12	4·3449152	4·9750019	12	4·2567745	4·8677991	12	4·1625166	4·7545654
13	4·3364207	4·9661976	13	4·2482800	4·8590175	13	4·1540221	4·7458076
14	4·3279518	4·9572696	14	4·2398111	4·8501179	14	4·1455532	4·7369333
15	4·3194200	4·9481752	15	4·2312793	4·8410496	15	4·1370214	4·7278933
16	4·3107497	4·9388803	16	4·2226090	4·8317821	16	4·1283511	4·7186511
17	4·3018789	4·9293678	17	4·2137382	4·8222949	17	4·1194803	4·7091885
18	4·2927584	4·9196381	18	4·2046177	4·8125851	18	4·1103598	4·6995004
19	4·2833526	4·9097020	19	4·1952119	4·8026670	19	4·1009540	4·6895983
20	4·2736388	4·8995885	20	4·1854981	4·7925668	20	4·0912402	4·6795115
21	4·2636076	4·8893409	21	4·1754669	4·7823300	21	4·0812090	4·6692853
22	4·2534960	4·8790144	22	4·1653553	4·7720150	22	4·0710974	4·6589801
23	4·2433067	4·8686098	23	4·1551660	4·7616220	23	4·0609081	4·6485991
24	4·2330415	4·8581274	24	4·1449008	4·7511505	24	4·0506429	4·6381387
25	4·2227014	4·8475646	25	4·1345607	4·7406003	25	4·0403028	4·6275993
26	4·2122865	4·8369201	26	4·1241458	4·7299686	26	4·0298879	4·6169805
27	4·2017961	4·8261909	27	4·1136554	4·7192526	27	4·0193975	4·6062771
28	4·1912286	4·8153718	28	4·1030879	4·7084490	28	4·0088300	4·5954863
29	4·1805818	4·8044612	29	4·0924411	4·6975519	29	3·9981832	4·5846049
30	4·1698524	4·7934502	30	4·0817117	4·6865585	30	3·9874538	4·5736257
31	4·1590364	4·7823350	31	4·0708957	4·6754593	31	3·9766378	4·5625445
32	4·1481289	4·7711066	32	4·0599882	4·6642508	32	3·9657303	4·5513526
33	4·1371242	4·7597585	33	4·0489835	4·6529229	33	3·9547256	4·5400438
34	4·1260158	4·7482811	34	4·0378751	4·6414672	34	3·9436172	4·5286085
35	4·1147963	4·7366666	35	4·0266556	4·6298742	35	3·9323977	4·5170379
36	4·1034575	4·7249015	36	4·0153168	4·6181350	36	3·9210589	4·5053215
37	4·0919903	4·7129761	37	4·0038496	4·6062362	37	3·9095917	4·4934486
38	4·0803549	4·7008784	38	3·9922442	4·5941672	38	3·8979863	4·4814068
39	4·0686305	4·6885951	39	3·9804898	4·5819145	39	3·8862319	4·4691828
40	4·0567157	4·6761108	40	3·9685750	4·5694639	40	3·8743171	4·4567639
41	4·0446280	4·6634126	41	3·9564873	4·5568003	41	3·8622294	4·4441341
42	4·0323542	4·6504805	42	3·9442135	4·5439076	42	3·8499556	4·4312777
43	4·0198802	4·6372986	43	3·9317395	4·5307677	43	3·8374816	4·4181773
44	4·0071913	4·6238476	44	3·9190506	4·5173614	44	3·8247927	4·4048137
45	3·9942716	4·6101044	45	3·9061309	4·5036670	45	3·8118730	4·3911657
46	3·9811046	4·5960451	46	3·8929639	4·4896611	46	3·7987060	4·3772099
47	3·9676729	4·5816432	47	3·8795322	4·4753164	47	3·7852743	4·3629200
48	3·9539583	4·5668679	48	3·8658176	4·4606031	48	3·7715597	4·3482654
49	3·9399417	4·5516838	49	3·8518010	4·4454862	49	3·7575431	4·3332122
50	3·9256033	4·5360507	50	3·8374626	4·4299250	50	3·7432047	4·3177195
51	3·9109223	4·5199207	51	3·8227816	4·4138720	51	3·7285237	4·3017393
52	3·8956326	4·5032387	52	3·8074919	4·3972704	52	3·7132340	4·2852143
53	3·8798981	4·4860140	53	3·7917574	4·3801332	53	3·6974995	4·2681594
54	3·8637015	4·4682050	54	3·7755608	4·3624188	54	3·6813029	4·2505354

ENGLISH LIFE TABLE, No. 3.

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	84		85			86		
Age of Male (x)	λ $D_{x,\,84}$	λ $N_{x,\,84}$	Age of Male (x)	λ $D_{x,\,85}$	λ $N_{x,\,85}$	Age of Male (x)	λ $D_{x,\,86}$	λ $N_{x,\,86}$
55	3·8470156	4·4497597	55	3·7588749	4·3440777	55	3·6646170	4·2322920
56	3·8298027	4·4306173	56	3·7416620	4·3250486	56	3·6474041	4·2133714
57	3·8120147	4·4107073	57	3·7238740	4·3052626	57	3·6296161	4·1937027
58	3·7935932	4·3899500	58	3·7054525	4·2846402	58	3·6111946	4·1732087
59	3·7744696	4·3682566	59	3·6863289	4·2630935	59	3·5920710	4·1518018
60	3·7545648	4·3455286	60	3·6664241	4·2405248	60	3·5721662	4·1293848
61	3·7337895	4·3216589	61	3·6456488	4·2168273	61	3·5513909	4·1058514
62	3·7120440	4·2965318	62	3·6239033	4·1918851	62	3·5296454	4·0810866
63	3·6892183	4·2700228	63	3·6010776	4·1655740	63	3·5068197	4·0549657
64	3·6651921	4·2419987	64	3·5770514	4·1377613	64	3·4827935	4·0273558
65	3·6398347	4·2123168	65	3·5516940	4·1083048	65	3·4574361	3·9981154
66	3·6130051	4·1808275	66	3·5248644	4·0770535	66	3·4306065	3·9670943
67	3·5845520	4·1473584	67	3·4964113	4·0438490	67	3·4021534	3·9341316
68	3·5543139	4·1117828	68	3·4661732	4·0085239	68	3·3719153	3·8990617
69	3·5221186	4·0738848	69	3·4339779	3·9709017	69	3·3397200	3·8617070
70	3·4877840	4·0334950	70	3·3996433	3·9307983	70	3·3053854	3·8218828
71	3·4511174	3·9904197	71	3·3629767	3·8880222	71	3·2687188	3·7793959
72	3·4119158	3·9444595	72	3·3237751	3·8423708	72	3·2295172	3·7340458
73	3·3699661	3·8954060	73	3·2818254	3·7936346	73	3·1875675	3·6856200
74	3·3250445	3·8430408	74	3·2369038	3·7415967	74	3·1426459	3·6339005
75	3·2769172	3·7871394	75	3·1887765	3·6860291	75	3·0945186	3·5786610
76	3·2253398	3·7274673	76	3·1371991	3·6266986	76	3·0429412	3·5196640
77	3·1700579	3·6637829	77	3·0819172	3·5633588	77	2·9870593	3·4566659
78	3·1108065	3·5958323	78	3·0226658	3·4957607	78	2·9284079	3·3894129
79	3·0473104	3·5233562	79	2·9591697	3·4236402	79	2·8649118	3·3176421
80	2·9792840	3·4460860	80	2·8911433	3·3467269	80	2·7968854	3·2410826
81	2·9064314	3·3637425	81	2·8182907	3·2647418	81	2·7240328	3·1594526
82	2·8284463	3·2760372	82	2·7403056	3·1773966	82	2·6460477	3·0724632
83	2·7450124	3·1826728	83	2·6568717	3·0843918	83	2·5626138	2·9798155
84	2·6558026	3·0833436	84	2·5676619	2·9854198	84	2·4734040	2·8811997
85	2·5604798	2·9777305	85	2·4723391	2·8801640	85	2·3780812	2·7762980
86	2·4586964	2·8655102	86	2·3705557	2·7682946	86	2·2762978	2·6647821
87	2·3500946	2·7463422	87	2·2619539	2·6494780	87	2·1676960	2·5463119
88	2·2343062	2·6198829	88	2·1461655	2·5233614	88	2·0519076	2·4205432
89	2·1109528	2·4857739	89	2·0228121	2·3895913	89	1·9285542	2·2871126
90	1·9796453	2·3436479	90	1·8915046	2·2477986	90	1·7972467	2·1456541
91	1·8399848	2·1931260	91	1·7518441	2·0976050	91	1·6575862	1·9957874
92	1·6915617	2·0338201	92	1·6034210	1·9386188	92	1·5091631	1·8371261
93	1·5339562	1·8653303	93	1·4458155	1·7704418	93	1·3515576	1·6692639
94	1·3667381	1·6872435	94	1·2785974	1·5926619	94	1·1843395	1·4917916
95	1·1894670	1·4991342	95	1·1013263	1·4048525	95	1·0070684	1·3042859
96	1·0016921	1·3005542	96	0·9135514	1·2065722	96	0·8192935	1·1063031
97	0·8029522	1·0910476	97	0·7148115	0·9973471	97	0·6205536	0·8973851
98	0·5927759	0·8700936	98	0·5046352	0·7766867	98	0·4103773	0·6770044
99	0·3706815	0·6370993	99	0·2825408	0·5439812	99	0·1882829	0·4446068
100	0·1361767	0·3912351	100	0·0480360	0·2984601	100	9·9537781	0·1993986
101	9·8887592	0·1311694	101	9·8006185	0·0387791	101	9·7063606	$\bar{1}$·9401179
102	9·6279162	$\bar{1}$·8541238	102	9·5397755	$\bar{1}$·7623784	102	9·4455176	$\bar{1}$ 6641717
103	9·3531246	$\bar{1}$·5537617	103	9·2649839	$\bar{1}$·4626974	103	9·1707260	$\bar{1}$·3654880
104	9·0638510	$\bar{1}$·2113876	104	8·9757103	1·1218880	104	8·8814524	$\bar{1}$·0257154
105	8·7595516		105	8·6714109		105	8·5771530	
106	8·4396724		106	8·3515317		106	8·2572738	
107	8·1036490		107	8·0155083		107	7·9212504	
108	7·7509067		108	7·6627660		108	7·5685081	
109	7·3808604		109	7·2927197		109	7·1984618	

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of **Female** (y)	87		88			89		
Age of **Male** (x)	λ $D_{x,\,87}$	λ $N_{x,\,87}$	**Age** of **Male** (x)	λ $D_{x,\,88}$	λ $N_{x,\,88}$	**Age** of **Male** (x)	λ $D_{x,\,89}$	λ $N_{x,\,89}$
0	4·3047010	4·8027635	0	4·1971356	4·6783663	0	4·0823578	4·5469435
1	4·2206988	4·7621922	1	4·1131334	4·6367757	1	3·9983556	4·5043163
2	4·1854179	4·7408149	2	4·0778525	4·6150300	2	3·9630747	4·4822006
3	4·1633046	4·7251142	3	4·0557392	4·5991371	3	3·9409614	4·4661158
4	4·1464029	4·7119809	4	4·0388375	4·5858847	4	3·9240597	4·4527414
5	4·1321755	4·7003472	5	4·0246101	4·5741667	5	3·9098323	4·4409414
6	4·1198143	4·6897323	6	4·0122489	4·5634977	6	3·8974711	4·4302148
7	4·1086708	4·6798020	7	4·0011054	4·5535287	7	3·8863276	4·4202079
8	4·0982566	4·6703442	8	3·9906912	4·5440449	8	3·8759134	4·4106980
9	4·0885092	4·6612475	9	3·9809438	4·5349364	9	3·8661660	4·4015763
10	4·0792740	4·6523924	10	3·9717086	4·5260786	10	3·8569308	4·3927156
11	4·0704095	4·6436658	11	3·9628441	4·5173604	11	3·8480663	4·3840040
12	4·0617875	4·6349747	12	3·9542221	4·5086847	12	3·8394443	4·3753422
13	4·0532930	4·6262377	13	3·9457276	4·4999685	13	3·8309498	4·3666458
14	4·0448241	4·6173894	14	3·9372587	4·4911435	14	3·8224809	4·3578438
15	4·0362923	4·6083752	15	3·9287269	4·4821554	15	3·8139491	4·3488809
16	4·0276220	4·5991601	16	3·9200566	4·4729653	16	3·8052788	4·3397157
17	4·0187512	4·5897207	17	3·9111858	4·4635504	17	3·7964080	4·3303239
18	4·0096307	4·5800532	18	3·9020653	4·4539032	18	3·7872875	4·3206970
19	4·0002249	4·5701680	19	3·8926595	4·4440347	19	3·7778817	4·3108444
20	3·9905111	4·5600939	20	3·8829457	4·4339727	20	3·7681679	4·3007954
21	3·9804799	4·5498775	21	3·8729145	4·4237664	21	3·7581367	4·2905975
22	3·9703683	4·5395832	22	3·8628029	4·4134816	22	3·7480251	4·2803225
23	3·9601790	4·5292113	23	3·8526136	4·4031198	23	3·7378358	4·2699700
24	3·9499138	4·5187622	24	3·8423484	4·3926806	24	3·7275706	4·2595406
25	3·9395737	4·5082345	25	3·8320083	4·3821635	25	3·7172305	4·2490332
26	3·9291588	4·4976265	26	3·8215934	4·3715665	26	3·7068156	4·2384466
27	3·9186684	4·4869353	27	3·8111030	4·3608870	27	3·6963252	4·2277780
28	3·9081009	4·4761581	28	3·8005355	4·3501217	28	3·6857577	4·2170244
29	3·8974541	4·4652896	29	3·7898887	4·3392665	29	3·6751109	4·2061812
30	3·8867247	4·4543257	30	3·7791593	4·3283159	30	3·6643815	4·1952444
31	3·8759087	4·4432591	31	3·7683433	4·3172650	31	3·6535655	4·1842069
32	3·8650012	4·4320849	32	3·7574358	4·3061054	32	3·6426580	4·1730632
33	3·8539965	4·4207935	33	3·7464311	4·2948320	33	3·6316533	4·1618045
34	3·8428881	4·4093778	34	3·7353227	4·2834340	34	3·6205449	4·1504251
35	3·8316686	4·3978278	35	3·7241032	4·2719041	35	3·6093254	4·1389129
36	3·8203298	4·3861337	36	3·7127644	4·2602310	36	3·5979866	4·1272603
37	3·8088626	4·3742845	37	3·7012972	4·2484045	37	3·5865194	4·1154551
38	3·7972572	4·3622685	38	3·6896918	4·2364126	38	3·5749140	4·1034862
39	3·7855028	4·3500728	39	3·6779374	4·2242429	39	3·5631596	4·0913413
40	3·7735880	4·3376828	40	3·6660226	4·2118819	40	3·5512448	4·0790068
41	3·7615003	4·3250854	41	3·6539349	4·1993139	41	3·5391571	4·0664683
42	3·7492265	4·3122637	42	3·6416611	4·1865252	42	3·5268833	4·0537091
43	3·7367525	4·2992003	43	3·6291871	4·1734971	43	3·5144093	4·0407152
44	3·7240636	4·2858769	44	3·6164982	4·1602118	44	3·5017204	4·0274658
45	3·7111439	4·2722729	45	3·6035785	4·1466489	45	3·4888007	4·0139418
46	3·6979769	4·2583644	46	3·5904115	4·1327859	46	3·4756337	4·0001211
47	3·6845452	4·2441264	47	3·5769798	4·1185964	47	3·4622020	3·9859785
48	3·6708306	4·2295283	48	3·5632652	4·1040515	48	3·4484874	3·9714837
49	3·6568140	4·2145353	49	3·5492486	4·0891167	49	3·4344708	3·9566040
50	3·6424756	4·1991077	50	3·5349102	4·0737507	50	3·4201324	3·9412972
51	3·6277946	4·1831967	51	3·5202292	4·0579052	51	3·4054514	3·9255137
52	3·6125049	4·1667438	52	3·5049395	4·0415206	52	3·3901617	3·9091938
53	3·5967704	4·1497673	53	3·4892050	4·0246182	53	3·3744272	3·8923612
54	3·5805738	4·1322283	54	3·1730084	4·0071599	54	3·3582306	3·8749796

JOINT LIVES:—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of **Female** (y)	87			88			89	
Age of **Male** (x)	$\lambda\ D_{x,\,87}$	$\lambda\ N_{x,\,87}$	**Age** of **Male** (x)	$\lambda\ D_{x,\,88}$	$\lambda\ N_{x,\,88}$	**Age** of **Male** (x)	$\lambda\ D_{x,\,89}$	$\lambda\ N_{x,\,89}$
55	3·5638879	4·1140787	55	3·4563225	3·9890981	55	3·3415447	3·8570012
56	3·5466750	4·0952590	56	3·4391096	3·9703757	56	3·3243318	3·8383699
57	3·5288870	4·0757028	57	3·4213216	3·9509244	57	3·3065438	3·8190192
58	3·5104655	4·0553306	58	3·4029001	3·9306689	58	3·2881223	3·7988729
59	3·4913419	4·0340567	59	3·3837765	3·9095207	59	3·2689987	3·7778457
60	3·4714371	4·0117839	60	3·3638717	3·8873860	60	3·2490939	3·7558414
61	3·4506618	3·9884073	61	3·3430964	3·8641585	61	3·2283186	3·7327563
62	3·4289163	3·9638114	62	3·3213509	3·8397244	62	3·2065731	3·7084753
63	3·4060906	3·9378728	63	3·2985252	3·8139591	63	3·1837474	3·6828767
64	3·3820644	3·9104579	64	3·2744990	3·7867315	64	3·1597212	3·6558268
65	3·3567070	3·8814252	65	3·2491416	3·7578983	65	3·1343638	3·6271855
66	3·3298774	3·8506242	66	3·2223120	3·7273094	66	3·1075342	3·5968005
67	3·3014243	3·8178965	67	3·1938589	3·6948052	67	3·0790811	3·5645122
68	3·2711862	3·7830720	68	3·1636208	3·6602193	68	3·0488430	3·5301536
69	3·2389909	3·7459760	69	3·1314255	3·6233724	69	3·0166477	3·4935487
70	3·2046563	3·7064224	70	3·0970909	3·5840800	70	2·9823131	3·4545083
71	3·1679897	3·6642169	71	3·0604243	3·5421479	71	2·9456465	3·4128396
72	3·1287881	3·6191581	72	3·0212227	3·4973720	72	2·9064449	3·3683392
73	3·0868384	3·5710353	73	2·9792730	3·4495424	73	2·8644952	3·3207941
74	3·0419168	3·5196272	74	2·9343514	3·3984381	74	2·8195736	3·2699844
75	2·9937895	3·4647068	75	2·8862241	3·3438297	75	2·7714463	3·2156798
76	2·9422121	3·4060377	76	2·8346467	3·2854800	76	2·7198689	3·1576417
77	2·8869302	3·3433735	77	2·7793648	3·2231428	77	2·6645870	3·0956230
78	2·8276788	3·2764597	78	2·7201134	3·1565619	78	2·6053356	3·0293680
79	2·7641827	3·2050335	79	2·6566173	3·0854733	79	2·5418395	2·9586107
80	2·6961563	3·1288217	80	2·5885909	3·0096039	80	2·4738131	2·8830763
81	2·6233037	3·0475431	81	2·5157383	2·9286708	81	2·4009605	2·8024830
82	2·5453186	2·9609063	82	2·4377532	2·8423820	82	2·3229754	2·7165367
83	2·4618847	2·8686110	83	2·3543193	2·7504367	83	2·2395415	2·6249356
84	2·3726749	2·7703490	84	2·2651095	2·6525229	84	2·1503317	2·5273682
85	2·2773521	2·6657995	85	2·1697867	2·5483231	85	2·0550089	2·4235113
86	2·1755687	2·5546333	86	2·0680033	2·4375048	86	1·9532255	2·3130390
87	2·0669669	2·4365125	87	1·9594015	2·3197288	87	1·8446237	2·1956061
88	1·9511785	2·3110860	88	1·8436131	2·1946465	88	1·7288353	2·0708640
89	1·8278251	2·1779966	89	1·7202597	2·0618960	89	1·6054819	1·9384522
90	1·6965176	2·0368743	90	1·5889522	1·9211083	90	1·4741744	1·7979983
91	1·5568571	1·8873376	91	1·4492917	1·7719041	91	1·3345139	1·6491216
92	1·4084340	1·7289962	92	1·3008686	1·6138873	92	1·1860908	1·4914345
93	1·2508285	1·5614556	93	1·1432631	1·4466583	93	1·0284853	1·3245232
94	1·0836104	1·3842942	94	0·9760450	1·2698164	94	0·8612672	1·1479822
95	0·9063393	1·1970903	95	0·7987739	1·0829181	95	0·6839961	0·9614021
96	0·7185644	0·9994090	96	0·6109990	0·8855308	96	0·4962212	0·7643181
97	0·5198245	0·7907846	97	0·4122591	0·6772053	97	0·2974813	0·5562784
98	0·3096482	0·5707297	98	0·2020828	0·4574428	98	0·0873050	0·3368198
99	0·0875538	0·3386158	99	9·9799884	0·2256969	99	9·8652106	0·1053739
100	9·8530490	0·0937368	100	9·7454836	$\bar{1}$·9810934	100	9·6307058	$\bar{1}$·8612356
101	9·6056315	$\bar{1}$·8348656	101	9·4980661	$\bar{1}$·7226339	101	9·3832883	$\bar{1}$·6030361
102	9·3447885	$\bar{1}$·5594278	102	9·2372231	$\bar{1}$·4477780	102	9·1224453	$\bar{1}$·3287872
103	9·0699969	$\bar{1}$·2615008	103	8·9624315	$\bar{1}$·1504494	103	8·8476537	$\bar{1}$·0322157
104	8·7807233	$\bar{2}$·9232440	104	8·6731579	$\bar{2}$·8135810	104	8·5583801	$\bar{2}$·6963564
105	8·4764239		105	8·3688585		105	8·2540807	
106	8·1565447		106	8·0489793		106	7·9342015	
107	7·8205213		107	7·7129559		107	7·5981781	
108	7·4677790		108	7·3602136		108	7·2454358	
109	7·0977327		109	6·9901673		109	6·8753895	

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	90			91			92	
Age of Male (x)	$\lambda\,D_{x,\,90}$	$\lambda\,N_{x,\,90}$	Age of Male (x)	$\lambda\,D_{x,\,91}$	$\lambda\,N_{x,\,91}$	Age of Male (x)	$\lambda\,D_{x,\,92}$	$\lambda\,N_{x,\,92}$
0	3·9599807	4·4081215	0	3·8296064	4·2615187	0	3·6908260	4·1067364
1	3·8759785	4·3644455	1	3·7456042	4·2167811	1	3·6068238	4·0609263
2	3·8406976	4·3419569	2	3·7103233	4·1939179	2	3·5715429	4·0376871
3	3·8185843	4·3256802	3	3·6882100	4·1774496	3	3·5494296	4·0210275
4	3·8016826	4·3121854	4	3·6713083	4·1638347	4	3·5325279	4·0072933
5	3·7874552	4·3003029	5	3·6570809	4·1518695	5	3·5183005	3·9952459
6	3·7750940	4·2895194	6	3·6447197	4·1410297	6	3·5059393	3·9843496
7	3·7639505	4·2794730	7	3·6335762	4·1309437	7	3·4947958	3·9742238
8	3·7535363	4·2699367	8	3·6231620	4·1213800	8	3·4843816	3·9646320
9	3·7437889	4·2608003	9	3·6134146	4·1122286	9	3·4746342	3·9554645
10	3·7345537	4·2519362	10	3·6041794	4·1033592	10	3·4653990	3·9465903
11	3·7256892	4·2432296	11	3·5953149	4·0946574	11	3·4565345	3·9378908
12	3·7170672	4·2345806	12	3·5866929	4·0860194	12	3·4479125	3·9292641
13	3·7085727	4·2259026	13	3·5781984	4·0773588	13	3·4394180	3·9206189
14	3·7001038	4·2171232	14	3·5697295	4·0686007	14	3·4309491	3·9118817
15	3·6915720	4·2081844	15	3·5611977	4·0596857	15	3·4224173	3·9029890
16	3·6829017	4·1990439	16	3·5525274	4·0505689	16	3·4137470	3·8938960
17	3·6740309	4·1896748	17	3·5436566	4·0412225	17	3·4048762	3·8845717
18	3·6649104	4·1800676	18	3·5345361	4·0316347	18	3·3957557	3·8750034
19	3·6555046	4·1702313	19	3·5251303	4·0218138	19	3·3863499	3·8651976
20	3·6457908	4·1601935	20	3·5154165	4·0117881	20	3·3766361	3·8551829
21	3·6357596	4·1500054	21	3·5053853	4·0016078	21	3·3666049	3·8450112
22	3·6256480	4·1397385	22	3·4952737	3·9913501	22	3·3564933	3·8347614
23	3·6154587	4·1293953	23	3·4850844	3·9810150	23	3·3463040	3·8244351
24	3·6051935	4·1189750	24	3·4748192	3·9706039	24	3·3360388	3·8140317
25	3·5948534	4·1084774	25	3·4644791	3·9601153	25	3·3256987	3·8035520
26	3·5844385	4·0979005	26	3·4540642	3·9495481	26	3·3152838	3·7929937
27	3·5739481	4·0872423	27	3·4435738	3·9388993	27	3·3047934	3·7823551
28	3·5633806	4·0764996	28	3·4330063	3·9281669	28	3·2942259	3·7716316
29	3·5527338	4·0656682	29	3·4223595	3·9173469	29	3·2835791	3·7608219
30	3·5420044	4·0547432	30	3·4116301	3·9064336	30	3·2728497	3·7499202
31	3·5311884	4·0437198	31	3·4008141	3·8954220	31	3·2620337	3·7389208
32	3·5202809	4·0325898	32	3·3899066	3·8843064	32	3·2511262	3·7278169
33	3·5092762	4·0213472	33	3·3789019	3·8730781	33	3·2401215	3·7166035
34	3·4981678	4·0099827	34	3·3677935	3·8617297	34	3·2290131	3·7052692
35	3·4869483	3·9984895	35	3·3565740	3·8502516	35	3·2177936	3·6938079
36	3·4756095	3·9868546	36	3·3452352	3·8386363	36	3·2064548	3·6822074
37	3·4641423	3·9750704	37	3·3337680	3·8268701	37	3·1949876	3·6704620
38	3·4525369	3·9631231	38	3·3221626	3·8149444	38	3·1833822	3·6585542
39	3·4407825	3·9510017	39	3·3104082	3·8028449	39	3·1716278	3·6464762
40	3·4288677	3·9386923	40	3·2984934	3·7905589	40	3·1597130	3·6342132
41	3·4167800	3·9261809	41	3·2864057	3·7780731	41	3·1476253	3·6217515
42	3·4045062	3·9134520	42	3·2741319	3·7653720	42	3·1353515	3·6090766
43	3·3920322	3·9004879	43	3·2616579	3·7524388	43	3·1228775	3·5961714
44	3·3793433	3·8872734	44	3·2489690	3·7392550	44	3·1101886	3·5830196
45	3·3664236	3·8737867	45	3·2360493	3·7258039	45	3·0972689	3·5695998
46	3·3532566	3·8600060	46	3·2228823	3·7120618	46	3·0841019	3·5558945
47	3·3398249	3·8459069	47	3·2094506	3·6980039	47	3·0706702	3·5418762
48	3·3261103	3·8314608	48	3·1957360	3·6836026	48	3·0569556	3·5275178
49	3·3120937	3·8166323	49	3·1817194	3·6688246	49	3·0429390	3·5127858
50	3·2977553	3·8013817	50	3·1673810	3·6536273	50	3·0286006	3·4976400
51	3·2830743	3·7856586	51	3·1527000	3·6379598	51	3·0139196	3·4820270
52	3·2677846	3·7693988	52	3·1374103	3·6217598	52	2·9986299	3·4658810
53	3·2520501	3·7526330	53	3·1216758	3·6050549	53	2·9828954	3·4492369
54	3·2358535	3·7353226	54	3·1054792	3·5878142	54	2·9666988	3·4320600

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	90		91			92		
Age of Male (x)	$\lambda\ D_{x,\ 90}$	$\lambda\ N_{x,\ 90}$	**Age of Male** (x)	$\lambda\ D_{x,\ 91}$	$\lambda\ N_{x,\ 91}$	**Age of Male** (x)	$\lambda\ D_{x,\ 92}$	$\lambda\ N_{x,\ 92}$
55	3·2191676	3·7174242	55	3·0887933	3·5699881	55	2·9500129	3·4143060
56	3·2019547	3·6988788	56	3·0715804	3·5515269	56	2·9328000	3·3959209
57	3·1841667	3·6796232	57	3·0537924	3·5323607	57	2·9150120	3·3768405
58	3·1657452	3·6595816	58	3·0353709	3·5124175	58	2·8965905	3·3569914
59	3·1466216	3·6386679	59	3·0162473	3·4916124	59	2·8774669	3·3362888
60	3·1267168	3·6167884	60	2·9963425	3·4698509	60	2·8575621	3·3146401
61	3·1059415	3·5938386	61	2·9755672	3·4470302	61	2·8367868	3·2919418
62	3·0841960	3·5697051	62	2·9538217	3·4230364	62	2·8150413	3·2680818
63	3·0613703	3·5442640	63	2·9309960	3·3977477	63	2·7922156	3·2429373
64	3·0373441	3·5173847	64	2·9069698	3·3710316	64	2·7681894	3·2163774
65	3·0119867	3·4889257	65	2·8816124	3·3427471	65	2·7428320	3·1882603
66	2·9851571	3·4587363	66	2·8547828	3·3127442	66	2·7160024	3·1584364
67	2·9567040	3·4266563	67	2·8263297	3·2808630	67	2·6875493	3·1267465
68	2·9264659	3·3925178	68	2·7960916	3·2469358	68	2·6573112	3·0930216
69	2·8942706	3·3561433	69	2·7638963	3·2107842	69	2·6251159	3·0570847
70	2·8599360	3·3173465	70	2·7295617	3·1722222	70	2·5907813	3·0187484
71	2·8232694	3·2759328	71	2·6928951	3·1310540	71	2·5541147	2·9778178
72	2·7840678	3·2316979	72	2·6536935	3·0870759	72	2·5149131	2·9340872
73	2·7421181	3·1844294	73	2·6117438	3·0400744	73	2·4729634	2·8873438
74	2·6971965	3·1339050	74	2·5668222	2·9898275	74	2·4280418	2·8373655
75	2·6490692	3·0798955	75	2·5186949	2·9361039	75	2·3799145	2·7839193
76	2·5974918	3·0221611	76	2·4671175	2·8786642	76	2·3283371	2·7267655
77	2·5422099	2·9604531	77	2·4118356	2·8172592	77	2·2730552	2·6656551
78	2·4829585	2·8945149	78	2·3525842	2·7516309	78	2·2138038	2·6003291
79	2·4194624	2·8240823	79	2·2890881	2·6815126	79	2·1503077	2·5305186
80	2·3514360	2·7488769	80	2·2210617	2·6066307	80	2·0822813	2·4559482
81	2·2785834	2·6686160	81	2·1482091	2·5266946	81	2·0094287	2·3763342
82	2·2005983	2·5830060	82	2·0702240	2·4414139	82	1·9314436	2·2913760
83	2·1171644	2·4917440	83	1·9867901	2·3504851	83	1·8480097	2·2007714
84	2·0279546	2·3945165	84	1·8975803	2·2535922	84	1·7587999	2·1042078
85	1·9326318	2·2910024	85	1·8022575	2·1504141	85	1·6634771	2·0013589
86	1·8308484	2·1808694	86	1·7004741	2·0406174	86	1·5616937	1·8918935
87	1·7222466	2·0637761	87	1·5918723	1·9238598	87	1·4530919	1·7754670
88	1·6064582	1·9393710	88	1·4760839	1·7997891	88	1·3373035	1·6517266
89	1·4831048	1·8072941	89	1·3527305	1·6680429	89	1·2139501	1·5203093
90	1·3517973	1·6671736	90	1·2214230	1·5282506	90	1·0826426	1·3808405
91	1·2121368	1·5186258	91	1·0817625	1·3800302	91	0·9429821	1·2329428
92	1·0637137	1·3612574	92	0·9333394	1·2229868	92	0·7945590	1·0762217
93	0·9061082	1·1946753	93	0·7757339	1·0567143	93	0·6369535	0·9102668
94	0·7388901	1·0184426	94	0·6085158	0·8808136	94	0·4697354	0·7346638
95	0·5616190	0·8321511	95	0·4312447	0·6948157	95	0·2924643	0·5490155
96	0·3738441	0·6353933	96	0·2434698	0·4983243	96	0·1046894	0·3527805
97	0·1751042	0·4276484	97	0·0447299	0·2909246	97	9·9059495	0·1456314
98	9·9649279	0·2084682	98	9·8345536	0·0720292	98	9·6957732	$\bar{1}$·9271136
99	9·7428335	$\bar{1}$·9773120	99	9·6124592	$\bar{1}$·8411717	99	9·4730788	$\bar{1}$·6965311
100	9·5083287	$\bar{1}$·7335183	100	9·3779544	$\bar{1}$·5976952	100	9·2391740	$\bar{1}$·4533183
101	9·2609112	$\bar{1}$·4759616	101	9·1305369	$\bar{1}$·3404441	101	8·9917565	$\bar{1}$·1964525
102	9·0000682	$\bar{1}$·2019431	102	8·8696939	$\bar{1}$·0674428	102	8·7309135	$\bar{2}$·9237620
103	8·7252766	$\bar{2}$·9063350	103	8·5949023	$\bar{2}$·7723217	103	8·4561219	$\bar{2}$·6304279
104	8·4360030	$\bar{2}$·5717083	104	8·3056287	$\bar{2}$·4393327	104	8·1668483	$\bar{2}$·2988531
105	8·1317036		105	8·0013293		105	7·8625189	
106	7·8118244		106	7·6814501		106	7·5426697	
107	7·4758010		107	7·3454267		107	7·2066463	
108	7·1230587		108	6·9926844		108	6·8539040	
109	6·7530124		109	6·6226381		109	6·4838577	

JOINT LIVES:—Male and Female Life.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	93		94			95		
Age of Male (x)	$\lambda\ D_{x,\ 93}$	$\lambda\ N_{x,\ 93}$	Age of Male (x)	$\lambda\ D_{x,\ 94}$	$\lambda\ N_{x,\ 94}$	Age of Male (x)	$\lambda\ D_{x,\ 95}$	$\lambda\ N_{x,\ 95}$
0	3·5432198	3·9433609	0	3·3863569	3·7709602	0	3·2197957	3·5890779
1	3·4592176	3·8964678	1	3·3023547	3·7229735	1	3·1357935	3·5399877
2	3·4239367	3·8728511	2	3·2670738	3·6989787	2	3·1005126	3·5156116
3	3·4018234	3·8560011	3	3·2449605	3·6819383	3	3·0783993	3·4983823
4	3·3849217	3·8421478	4	3·2280588	3·6679672	4	3·0614976	3·4842927
5	3·3706943	3·8300193	5	3·2138314	3·6557567	5	3·0472702	3·4720013
6	3·3583331	3·8190666	6	3·2014702	3·6447487	6	3·0349090	3·4609369
7	3·3471896	3·8089014	7	3·1903267	3·6345438	7	3·0237655	3·4506924
8	3·3367754	3·7992813	8	3·1799125	3·6248955	8	3·0133513	3·4410161
9	3·3270280	3·7900972	9	3·1701651	3·6156934	9	3·0036039	3·4317962
10	3·3177928	3·7812160	10	3·1609299	3·6068058	10	2·9943687	3·4229002
11	3·3089283	3·7725197	11	3·1520654	3·5981106	11	2·9855042	3·4142058
12	3·3003063	3·7639018	12	3·1434434	3·5895017	12	2·9768822	3·4056052
13	3·2918118	3·7552725	13	3·1349489	3·5808862	13	2·9683877	3·3970035
14	3·2833429	3·7465533	14	3·1264800	3·5721859	14	2·9599188	3·3883215
15	3·2748111	3·7376839	15	3·1179482	3·5633363	15	2·9513870	3·3794917
16	3·2661408	3·7286127	16	3·1092779	3·5542893	16	2·9427167	3·3704656
17	3·2572700	3·7193106	17	3·1004071	3·5450076	17	2·9338459	3·3612055
18	3·2481495	3·7097617	18	3·0912866	3·5354777	18	2·9247254	3·3516941
19	3·2387437	3·6999712	19	3·0818808	3·5257029	19	2·9153196	3·3419346
20	3·2290299	3·6899674	20	3·0721670	3·5157096	20	2·9056058	3·3319528
21	3·2189987	3·6798029	21	3·0621358	3·5055529	21	2·8955746	3·3218031
22	3·2088871	3·6695614	22	3·0520242	3·4953181	22	2·8854630	3·3115755
23	3·1986978	3·6592429	23	3·0418349	3·4850069	23	2·8752737	3·3012714
24	3·1884326	3·6488477	24	3·0315697	3·4746198	24	2·8650085	3·2908914
25	3·1780925	3·6383754	25	3·0212296	3·4641555	25	2·8546684	3·2804350
26	3·1676776	3·6278265	26	3·0108147	3·4536134	26	2·8442535	3·2699013
27	3·1571872	3·6171965	27	3·0003243	3·4429938	27	2·8337631	3·2592880
28	3·1466197	3·6064835	28	2·9897568	3·4322887	28	2·8231956	3·2485926
29	3·1359729	3·5956825	29	2·9791100	3·4214982	29	2·8125488	3·2378116
30	3·1252435	3·5847913	30	2·9683806	3·4106170	30	2·8018194	3·2269400
31	3·1144275	3·5738031	31	2·9575646	3·3996396	31	2·7910034	3·2159729
32	3·1035200	3·5627127	32	2·9466571	3·3885601	32	2·7800959	3·2049042
33	3·0925153	3·5515098	33	2·9356524	3·3773709	33	2·7690912	3·1937275
34	3·0814069	3·5401918	34	2·9245440	3·3660650	34	2·7579828	3·1824338
35	3·0701874	3·5287445	35	2·9133245	3·3546328	35	2·7467633	3·1710158
36	3·0588486	3·5171616	36	2·9019857	3·3430650	36	2·7354245	3·1594629
37	3·0473814	3·5054308	37	2·8905185	3·3313518	37	2·7239573	3·1477653
38	3·0357760	3·4935445	38	2·8789131	3·3194812	38	2·7123519	3·1359121
39	3·0240216	3·4814856	39	2·8671587	3·3074423	39	2·7005975	3·1238911
40	3·0121068	3·4692445	40	2·8552439	3·2952217	40	2·6886827	3·1116902
41	3·0000191	3·4568047	41	2·8431562	3·2828053	41	2·6765950	3·0992952
42	2·9877453	3·4441555	42	2·8308824	3·2701788	42	2·6643212	3·0866915
43	2·9752713	3·4312775	43	2·8184084	3·2573262	43	2·6518472	3·0738635
44	2·9625824	3·4181543	44	2·8057195	3·2442308	44	2·6391583	3·0607946
45	2·9496627	3·4047668	45	2·7927998	3·2308736	45	2·6262386	3·0474662
46	2·9364957	3·3910947	46	2·7796328	3·2172339	46	2·6130716	3·0338579
47	2·9230640	3·3771142	47	2·7662011	3·2032886	47	2·5996399	3·0199467
48	2·9093494	3·3627968	48	2·7524865	3·1890108	48	2·5859253	3·0057060
49	2·8953328	3·3481100	49	2·7384699	3·1743664	49	2·5719087	2·9911033
50	2·8809944	3·3330120	50	2·7241315	3·1593148	50	2·5575703	2·9760959
51	2·8663134	3·3174501	51	2·7094505	3·1438027	51	2·5428893	2·9606311
52	2·8510237	3·3013571	52	2·6941608	3·1277593	52	2·5275996	2·9446361
53	2·8352892	3·2847692	53	2·6784263	3·1112258	53	2·5118651	2·9281536
54	2·8190926	3·2676536	54	2·6622297	3·0941685	54	2·4956685	2·9111534

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Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	93		94			95		
Age of Male (x)	λ $D_{x,\,93}$	λ $N_{x,\,93}$	Age of Male (x)	λ $D_{x,\,94}$	λ $N_{x,\,94}$	Age of Male (x)	λ $D_{x,\,95}$	λ $N_{x,\,95}$
55	2·8024067	3·2499672	55	2·6455438	3·0765458	55	2·4789826	2·8935915
56	2·7851938	3·2316559	56	2·6283309	3·0583050	56	2·4617697	2·8754178
57	2·7674058	3·2126566	57	2·6105429	3·0393832	57	2·4439817	2·8565706
58	2·7489843	3·1928962	58	2·5921214	3·0197077	58	2·4255602	2·8369770
59	2·7298607	3·1722921	59	2·5729978	2·9991967	59	2·4064366	2·8165554
60	2·7099559	3·1507503	60	2·5530930	2·9777579	60	2·3865318	2·7952145
61	2·6891806	3·1281691	61	2·5323177	2·9552889	61	2·3657565	2·7728533
62	2·6674351	3·1044362	62	2·5105722	2·9316775	62	2·3440110	2·7493606
63	2·6446094	3·0794302	63	2·4877465	2·9068036	63	2·3211853	2·7246133
64	2·6205832	3·0530189	64	2·4637203	2·8805358	64	2·2971591	2·6984833
65	2·5952258	3·0250629	65	2·4383629	2·8527337	65	2·2718017	2·6708301
66	2·5683962	2·9954110	66	2·4115333	2·8232472	66	2·2449721	2·6415029
67	2·5399431	2·9639039	67	2·3830802	2·7919172	67	2·2165190	2·6103439
68	2·5097050	2·9303743	68	2·3528421	2·7585751	68	2·1862809	2·5771838
69	2·4775097	2·8946434	69	2·3206468	2·7230434	69	2·1540856	2·5418450
70	2·4431751	2·8565253	70	2·2863122	2·6851351	70	2·1197510	2·5041404
71	2·4065085	2·8158227	71	2·2496456	2·6446542	71	2·0830844	2·4638736
72	2·3673069	2·7723327	72	2·2104440	2·6013950	72	2·0438828	2·4208399
73	2·3253572	2·7258390	73	2·1684943	2·5551440	73	2·0019331	2·3748234
74	2·2804356	2·6761190	74	2·1235727	2·5056763	74	1·9570115	2·3256009
75	2·2323083	2·6229431	75	2·0754454	2·4527599	75	1·9088842	2·2729392
76	2·1807309	2·5660673	76	2·0238680	2·3961558	76	1·8573068	2·2165958
77	2·1254490	2·5052423	77	1·9685861	2·3356075	77	1·8020249	2·1563204
78	2·0661976	2·4402099	78	1·9093347	2·2708600	78	1·7427735	2·0918516
79	2·0027015	2·3707000	79	1·8458386	2·2016432	79	1·6792774	2·0229198
80	1·9346751	2·2964357	80	1·7778122	2·1276774	80	1·6112510	1·9492465
81	1·8618225	2·2171311	81	1·7049596	2·0486764	81	1·5383984	1·8705420
82	1·7838374	2·1324896	82	1·6269745	1·9643436	82	1·4604133	1·7865108
83	1·7004035	2·0422053	83	1·5435406	1·8743722	83	1·3769794	1·6968455
84	1·6111937	1·9459617	84	1·4543308	1·7784457	84	1·2877696	1·6012297
85	1·5158709	1·8434383	85	1·3590080	1·6762371	85	1·1924468	1·4993351
86	1·4140875	1·7342973	86	1·2572246	1·5674169	86	1·0906634	1·3908239
87	1·3054857	1·6181967	87	1·1486228	1·4516360	87	0·9820616	1·2753597
88	1·1896973	1·4947819	88	1·0328344	1·3285407	88	0·8662732	1·1525788
89	1·0663439	1·3636891	89	0·9094810	1·1977684	89	0·7429198	1·0221190
90	0·9350364	1·2245435	90	0·7781735	1·0589420	90	0·6116123	0·8836103
91	0·7953759	1·0769608	91	0·6385130	0·9116742	91	0·4719518	0·7366594
92	0·6469528	0·9205511	92	0·4900899	0·7555776	92	0·3235287	0·5808680
93	0·4893473	0·7549214	93	0·3324844	0·5902398	93	0·1659232	0·4158411
94	0·3221292	0·5796350	94	0·1652663	0·4152739	94	9·9987051	0·2411479
95	0·1448581	0·3942590	95	9·9879952	0·2302189	95	9·8214340	0·0564793
96	9·9570832	0·1984371	96	9·8002203	0·0346285	96	9·6336591	$\bar{1}$·8611758
97	9·7583433	$\bar{1}$·9914476	97	9·6014804	$\bar{1}$·8282086	97	9·4349192	$\bar{1}$·6548501
98	9·5481670	$\bar{1}$·7731279	98	9·3913041	$\bar{1}$·6099144	98	9·2247429	$\bar{1}$·4374334
99	9·3260726	$\bar{1}$·5430742	99	9·1692097	$\bar{1}$·3798492	99	9·0026485	$\bar{1}$·2070955
100	9·0915678	$\bar{1}$·3001605	100	8·9347049	$\bar{1}$·1376705	100	8·7681437	$\bar{2}$·9647309
101	8·8441503	$\bar{1}$·0437551	101	8·6872874	$\bar{2}$·8813847	101	8·5207262	$\bar{2}$·7101174
102	8·5833073	$\bar{2}$·7715875	102	8·4264444	$\bar{2}$·6106602	102	8·2598832	$\bar{2}$·4377506
103	8·3085157	$\bar{2}$·4785665	103	8·1516528	$\bar{2}$·3180633	103	7·9850916	$\bar{2}$·1492191
104	8·0192421	$\bar{2}$·1492191	104	7·8623792	$\bar{3}$·9912261	104	7·6958180	$\bar{3}$·8195439
105	7·7149427	$\bar{3}$·7160033	105	7·5580798	$\bar{3}$·5563025	105	7·3915186	
106	7·3950635		106	7·2382006		106	7·0716394	
107	7·0590401		107	6·9021772		107	6·7356160	
108	6·7062978		108	6·5194349		108	6·3828737	
109	6·3362515		109	6·1793886		109	6·0128274	

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of **Female** (y)	96		97			98		
Age of **Male** (x)	λ $D_{x,\,96}$	λ $N_{x,\,96}$	**Age** of **Male** (x)	λ $D_{x,\,97}$	λ $N_{x,\,97}$	**Age** of **Male** (x)	λ $D_{x,\,98}$	λ $N_{x,\,98}$
0	3·0430837	3·3972255	0	2·8557572	3·1948669	0	2·6573419	2·9813751
1	2·9590815	3·3470163	1	2·7717550	3·1435153	1	2·5733397	2·9288453
2	2·9238006	3·3222578	2	2·7364741	3·1183669	2	2·5380588	2·9032935
3	2·9016873	3·3048373	3	2·7143608	3·1007534	3	2·5159455	2·8854811
4	2·8847856	3·2906301	4	2·6974591	3·0864275	4	2·4990438	2·8710321
5	2·8705582	3·2782580	5	2·6832317	3·0739723	5	2·4848164	2·8584927
6	2·8581970	3·2671375	6	2·6708705	3·0627959	6	2·4724552	2·8472567
7	2·8470535	3·2568526	7	2·6597270	3·0524705	7	2·4613117	2·8368904
8	2·8366393	3·2471463	8	2·6493128	3·0427338	8	2·4508975	2·8271223
9	2·8268919	3·2379094	9	2·6395654	3·0334781	9	2·4411501	2·8178462
10	2·8176567	3·2290052	10	2·6303302	3·0245649	10	2·4319149	2·8089236
11	2·8087922	3·2203105	11	2·6214657	3·0158709	11	2·4230504	2·8002282
12	2·8001702	3·2117174	12	2·6128437	3·0072838	12	2·4144284	2·7916493
13	2·7916757	3·2031295	13	2·6043492	2·9987086	13	2·4059339	2·7830864
14	2·7832068	3·1944641	14	2·5958803	2·9900616	14	2·3974650	2·7744564
15	2·7746750	3·1856555	15	2·5873485	2·9812721	15	2·3889332	2·7656887
16	2·7660047	3·1766483	16	2·5786782	2·9722876	16	2·3802629	2·7567251
17	2·7571339	3·1674102	17	2·5698074	2·9630669	17	2·3713921	2·7475275
18	2·7480134	3·1579177	18	2·5606869	2·9535949	18	2·3622716	2·7380691
19	2·7386076	3·1481731	19	2·5512811	2·9438658	19	2·3528658	2·7283587
20	2·7288938	3·1382019	20	2·5415673	2·9339052	20	2·3431520	2·7184095
21	2·7188626	3·1280595	21	2·5315361	2·9237697	21	2·3331208	2·7082815
22	2·7087510	3·1178388	22	2·5214245	2·9135564	22	2·3230092	2·6980744
23	2·6985617	3·1075416	23	2·5112352	2·9032659	23	2·3128199	2·6877920
24	2·6882965	3·0971689	24	2·5009700	2·8929001	24	2·3025547	2·6774327
25	2·6779564	3·0867200	25	2·4906299	2·8824585	25	2·2922146	2·6669979
26	2·6675415	3·0761936	26	2·4802150	2·8719399	26	2·2817997	2·6564873
27	2·6570511	3·0655887	27	2·4697246	2·8613420	27	2·2713093	2·6458976
28	2·6464836	3·0549015	28	2·4591571	2·8506640	28	2·2607418	2·6352263
29	2·6358368	3·0441293	29	2·4485103	2·8398995	29	2·2500950	2·6244729
30	2·6251074	3·0332673	30	2·4377809	2·8290476	30	2·2393656	2·6136283
31	2·6142914	3·0223104	31	2·4269649	2·8181005	31	2·2285496	2·6026925
32	2·6033839	3·0112523	32	2·4160574	2·8070531	32	2·2176421	2·5916555
33	2·5923792	3·0000863	33	2·4050527	2·7958988	33	2·2066374	2·5805121
34	2·5812708	2·9888059	34	2·3939443	2·7846294	34	2·1955290	2·5692556
35	2·5700513	2·9774007	35	2·3827248	2·7732377	35	2·1843095	2·5578764
36	2·5587125	2·9658627	36	2·3713860	2·7617137	36	2·1729707	2·5463662
37	2·5472453	2·9541803	37	2·3599188	2·7500476	37	2·1615035	2·5347151
38	2·5356399	2·9423439	38	2·3483134	2·7382262	38	2·1498981	2·5229122
39	2·5238855	2·9303407	39	2·3365590	2·7262413	39	2·1381437	2·5109429
40	2·5119707	2·9181583	40	2·3246442	2·7140774	40	2·1262289	2·4987983
41	2·4998830	2·9057840	41	2·3125565	2·7017225	41	2·1141412	2·4864631
42	2·4876092	2·8932023	42	2·3002827	2·6891623	42	2·1018674	2·4739247
43	2·4751352	2·8803979	43	2·2878087	2·6763817	43	2·0893934	2·4611668
44	2·4624463	2·8673543	44	2·2751198	2·6633635	44	2·0767045	2·4481743
45	2·4495266	2·8540539	45	2·2622001	2·6500898	45	2·0637848	2·4349280
46	2·4363596	2·8404762	46	2·2490331	2·6365420	46	2·0506178	2·4214098
47	2·4229279	2·8265982	47	2·2356014	2·6226968	47	2·0371861	2·4075982
48	2·4092133	2·8123939	48	2·2218868	2·6085281	48	2·0234715	2·3934647
49	2·3951967	2·7978303	49	2·2078702	2·5940045	49	2·0094549	2·3789808
50	2·3808583	2·7828673	50	2·1935318	2.5790825	50	1·9951165	2·3641016
51	2·3661773	2·7674483	51	2·1788108	2.5637100	51	1·9804355	2·3487744
52	2·3508876	2·7514993	52	2·1635011	2.5478067	52	1·9651458	2·3329163
53	2·3351531	2·7350669	53	2·1478266	2.5314227	53	1·9494113	2·3165820
54	2·3189565	2·7181203	54	2·1316300	2.5145292	54	1·9332147	2·2997413

JOINT LIVES :—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\ y}$ and $N_{x,\ y}$.

Age of Female (y)	96		97			98		
Age of Male (x)	$\lambda\ D_{x,\ 96}$	$\lambda\ N_{x,\ 96}$	Age of Male (x)	$\lambda\ D_{x,\ 97}$	$\lambda\ N_{x,\ 97}$	Age of Male (x)	$\lambda\ D_{x,\ 98}$	$\lambda\ N_{x,\ 98}$
55	2·3022706	2·7006189	55	2·1149141	2·4970859	55	1·9165288	2·2823552
56	2·2850577	2·6825097	56	2·0977312	2·4790424	56	1·8993159	2·2643752
57	2·2672697	2·6637339	57	2·0799432	2·4603355	57	1·8815279	2·2457408
58	2·2488482	2·6442199	58	2·0615217	2·4408980	58	1·8631064	2·2263813
59	2·2297246	2·6238858	59	2·0423981	2·4206504	59	1·8439828	2·2062185
60	2·2098198	2·6026405	60	2·0224933	2·3994990	60	1·8240780	2·1851616
61	2·1890445	2·5803832	61	2·0017180	2·3773445	61	1·8033027	2·1631112
62	2·1672990	2·5570040	62	1·9799725	2·3540775	62	1·7815572	2·1399568
63	2·1444733	2·5325823	63	1·9571468	2·3295772	63	1·7587315	2·1155795
64	2·1204471	2·5063847	64	1·9331206	2·3037136	64	1·7347053	2·0898497
65	2·0950897	2·4788766	65	1·9077632	2·2763478	65	1·7093479	2·0626275
66	2·0682601	2·4497052	66	1·8809336	2·2473303	66	1·6825183	2·0337650
67	2·0398070	2·4187122	67	1·8524805	2·2165016	67	1·6540652	2·0031032
68	2·0095689	2·3857296	68	1·8222424	2·1836943	68	1·6238271	1·9704729
69	1·9773736	2·3505789	69	1·7900471	2·1487300	69	1·5916318	1·9356972
70	1·9430390	2·3130738	70	1·7557125	2·1114212	70	1·5572972	1·8985887
71	1·9063724	2·2730168	71	1·7190459	2·0715727	71	1·5206306	1·8589490
72	1·8671708	2·2302036	72	1·6798443	2·0289770	72	1·4814290	1·8165753
73	1·8252211	2·1844171	73	1·6378946	1·9834202	73	1·4394793	1·7712486
74	1·7802995	2·1354338	74	1·5929730	1·9346752	74	1·3945577	1·7227474
75	1·7321722	2·0830216	75	1·5448457	1·8825086	75	1·3464304	1·6708320
76	1·6805948	2·0269364	76	1·4932683	1·8266792	76	1·2948530	1·6152608
77	1·6253129	1·9669260	77	1·4379864	1·7669338	77	1·2395711	1·5557823
78	1·5660615	1·9027310	78	1·3787350	1·7030092	78	1·1803197	1·4921343
79	1·5025654	1·8340791	79	1·3152389	1·6346365	79	1·1168236	1·4240416
80	1·4345390	1·7606923	80	1·2472125	1·5615331	80	1·0487972	1·3512279
81	1·3616864	1·6822814	81	1·1743599	1·4834118	81	0·9759446	1·2733995
82	1·2837013	1·5985454	82	1·0963748	1·3999730	82	0·8979595	1·1902588
83	1·2002674	1·5091797	83	1·0129409	1·3109035	83	0·8145256	1·1014962
84	1·1110576	1·4138678	84	0·9237311	1·2158912	84	0·7253158	1·0067826
85	1·0157348	1·3122832	85	0·8284083	1·1146110	85	0·6299930	0·9058067
86	0·9139514	1·2040847	86	0·7266249	1·0067227	86	0·5282096	0·7982293
87	0·8053496	1·0889224	87	0·6180231	0·8918774	87	0·4196078	0·6837043
88	0·6895612	0·9664562	88	0·5022347	0·7697022	88	0·3038194	0·5618524
89	0·5662078	0·8363051	89	0·3788813	0·6398748	89	0·1804660	0·4322957
90	0·4349003	0·6981005	90	0·2475738	0·5019625	90	0·0491585	0·2947307
91	0·2952398	0·5514622	91	0·1079133	0·3556239	91	9·9094980	0·1486643
92	0·1468167	0·3959900	92	9·9594902	0·2004674	92	9·7610749	$\bar{1}$·9937888
93	9·9892112	0·2312656	93	9·8018847	0·0360697	93	9·6034694	$\bar{1}$·8297539
94	9·8219931	0·0568668	94	9·6346666	$\bar{1}$·8619524	94	9·4362513	$\bar{1}$·6560023
95	9·6447220	$\bar{1}$·8723894	95	9·4573955	$\bar{1}$·6777894	95	9·2589802	$\bar{1}$·4720247
96	9·4569471	$\bar{1}$·6774244	96	9·2696206	$\bar{1}$·4830164	96	9·0712053	$\bar{1}$·2776092
97	9·2582072	$\bar{1}$·4715851	97	9·0708807	$\bar{1}$·2773800	97	8·8724654	$\bar{1}$·0722499
98	9·0480309	$\bar{1}$·2540645	98	8·8607044	$\bar{1}$·0606978	98	8·6622891	$\bar{2}$·8555192
99	8·8259365	$\bar{1}$·0253059	99	8·6386100	$\bar{2}$·8312297	99	8·4401947	$\bar{2}$·6273659
100	8·5914317	$\bar{2}$·7817554	100	8·4041052	$\bar{2}$·5910646	100	8·2056899	$\bar{2}$·3856063
101	8·3440142	$\bar{2}$·5263393	101	8·1566877	$\bar{2}$·3324385	101	7·9582724	$\bar{2}$·1335389
102	8·0831712	$\bar{2}$·2576786	102	7·8958447	$\bar{2}$·0606978	102	7·6974294	$\bar{3}$·8573325
103	7·8083796	$\bar{3}$·9637878	103	7·6210531	$\bar{3}$·7781513	103	7·4226378	$\bar{3}$·5563025
104	7·5191060	$\bar{3}$·6434527	104	7·3317795	$\bar{3}$·4471580	104	7·1333642	$\bar{3}$·2552725
105	7·2148066		105	7·0274801		105	6·8290648	
106	6·8949274		106	6·7076009		106	6·5091856	
107	6·5589040		107	6·3715775		107	6·1731622	
108	6·2061617		108	6·0188352		108	5·8204199	
109	5·8361154		109	5·6487889		109	5·4503736	

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Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	99			100			101	
Age of Male (x)	λ $D_{x,\,99}$	λ $N_{x,\,99}$	Age of Male (x)	λ $D_{x,\,100}$	λ $N_{x,\,100}$	Age of Male (x)	λ $D_{x,\,101}$	λ $N_{x,\,101}$
0	2·4473521	2·7559693	0	2·2252916	2·5175575	0	1·9906531	2·2643945
1	2·3633499	2·7021909	1	2·1412894	2·4623965	1	1·9066509	2·2075819
2	2·3280690	2·6762134	2	2·1060085	2·4359415	2	1·8713700	2·1805550
3	2·3059557	2·6581880	3	2·0838952	2·4176825	3	1·8492567	2·1620118
4	2·2890540	2·6436086	4	2·0669935	2·4029557	4	1·8323550	2·1471109
5	2·2748266	2·6309788	5	2·0527661	2·3902249	5	1·8181276	2·1342572
6	2·2624654	2·6196807	6	2·0404049	2·3788555	6	1·8057664	2·1228029
7	2·2513219	2·6092678	7	2·0292614	2·3683929	7	1·7946229	2·1122759
8	2·2409077	2·5994671	8	2·0188472	2·3585516	8	1·7842087	2·1023881
9	2·2311603	2·5901695	9	2·0090998	2·3492290	9	1·7744613	2·0930328
10	2·2219251	2·5812349	10	1·9998646	2·3402816	10	1·7652261	2·0840674
11	2·2130606	2·5725382	11	1·9910001	2·3315817	11	1·7563616	2·0753619
12	2·2044386	2·5639649	12	1·9823781	2·3230152	12	1·7477396	2·0668002
13	2·1959441	2·5554174	13	1·9738836	2·3144803	13	1·7392451	2·0582802
14	2·1874752	2·5468054	14	1·9654147	2·3058898	14	1·7307762	2·0497114
15	2·1789434	2·5380582	15	1·9568829	2·2971681	15	1·7222444	2·0410187
16	2·1702731	2·5291196	16	1·9482126	2·2882542	16	1·7135741	2·0321374
17	2·1614023	2·5199435	17	1·9393418	2·2791046	17	1·7047033	2·0230186
18	2·1522818	2·5105102	18	1·9302213	2·2696925	18	1·6955828	2·0136338
19	2·1428760	2·5008126	19	1·9208155	2·2600132	19	1·6861770	2·0039760
20	2·1331622	2·4908739	20	1·9111017	2·2500881	20	1·6764632	1·9940659
21	2·1231310	2·4807527	21	1·9010705	2·2399751	21	1·6664320	1·9839622
22	2·1130194	2·4705546	22	1·8909589	2·2297839	22	1·6563204	1·9737797
23	2·1028301	2·4602783	23	1·8807696	2·2195159	23	1·6461311	1·9635215
24	2·0925649	2·4499271	24	1·8705044	2·2091729	24	1·6358659	1·9531869
25	2·0822248	2·4395001	25	1·8601643	2·1987544	25	1·6255258	1·9427777
26	2·0718099	2·4289960	26	1·8497494	2·1882589	26	1·6151109	1·9322931
27	2·0613195	2·4184156	27	1·8392590	2·1776866	27	1·6046205	1·9217297
28	2·0507520	2·4077528	28	1·8286915	2·1670339	28	1·5940530	1·9110872
29	2·0401052	2·3970061	29	1·8180447	2·1562974	29	1·5834062	1·9003628
30	2·0293758	2·3861742	30	1·8073153	2·1454742	30	1·5726768	1·8895504
31	2·0185598	2·3752465	31	1·7964993	2·1345580	31	1·5618608	1·8786476
32	2·0076523	2·3642226	32	1·7855918	2·1235446	32	1·5509533	1·8676460
33	1·9966476	2·3530898	33	1·7745871	2·1124257	33	1·5399486	1.8565428
34	1·9855392	2·3418459	34	1·7634787	2·1011953	34	1·5288402	1·8453269
35	1·9743197	2·3304808	35	1·7522592	2·0898448	35	1·5176207	1·8339926
36	1·9629809	2·3189849	36	1·7409204	2·0783650	36	1·5062819	1·8225310
37	1·9515137	2·3073493	37	1·7291532	2·0667455	37	1·4948147	1·8109311
38	1·9399083	2·2955620	38	1·7178478	2·0549772	38	1·4832093	1·7991820
39	1·9281539	2·2836121	39	1·7060934	2·0430466	39	1·4714549	1·7872748
40	1·9162391	2·2714866	40	1·6941786	2·0309424	40	1·4595401	1·7751938
41	1·9041514	2·2591731	41	1·6820909	2·0186507	41	1·4474524	1·7629283
42	1·8918776	2·2466566	42	1·6698171	2·0061583	42	1·4351786	1·7504621
43	1·8794036	2·2339230	43	1·6573431	1·9934504	43	1·4227046	1·7377832
44	1·8667147	2·2209554	44	1·6446542	1·9805106	44	1·4100157	1·7248752
45	1·8537950	2·2077378	45	1·6317345	1·9673224	45	1·3970960	1·7117204
46	1·8406280	2·1942503	46	1·6185675	1·9538684	46	1·3839290	1·6983016
47	1·8271963	2·1804709	47	1·6051358	1·9401263	47	1·3704973	1·6846012
48	1·8134817	2·1663760	48	1·5914212	1·9260701	48	1·3567827	1·6705928
49	1·7994651	2·1519322	49	1·5774046	1·9116721	49	1·3427661	1·6562430
50	1·7851267	2·1370992	50	1·5630662	1·8968871	50	1·3284277	1·6415158
51	1·7704457	2·1218184	51	1·5483852	1·8816585	51	1·3137467	1·6263445
52	1·7551560	2·1060075	52	1·5330955	1·8658972	52	1·2984570	1·6106421
53	1·7394215	2·0897235	53	1·5173610	1·8496675	53	1·2827225	1·5944721
54	1·7232249	2·0729381	54	1·5011644	1·8329411	54	1·2665259	1·5778123

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Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of **Female** (*y*)	99		100			101		
Age of **Male** (*x*)	λ $D_{x,\,99}$	λ $N_{x,\,99}$	**Age** of **Male** (*x*)	λ $D_{x,\,100}$	λ $N_{x,\,100}$	**Age** of **Male** (*x*)	λ $D_{x,\,101}$	λ $N_{x,\,101}$
55	1·7065390	2·0556123	55	1·4844785	1·8156800	55	1·2498400	1·5606239
56	1·6893261	2·0376974	56	1·4672656	1·7978365	56	1·2326271	1·5428616
57	1·6715381	2·0191362	57	1·4494776	1·7793518	57	1·2148391	1·5244649
58	1·6531166	1·9998584	58	1·4310561	1·7601608	58	1·1964176	1·5053698
59	1·6339930	1·9797832	59	1·4119325	1·7401834	59	1·1772940	1·4855000
60	1·6140882	1·9588242	60	1·3920277	1·7193280	60	1·1573892	1·4647681
61	1·5933129	1·9368805	61	1·3712524	1·6975013	61	1·1366139	1·4430689
62	1·5715674	1·9138445	62	1·3495069	1·6745911	62	1·1148684	1·4203057
63	1·5487417	1·8895947	63	1·3266812	1·6504814	63	1·0920427	1·3963528
64	1·5247155	1·8640035	64	1·3026550	1·6250407	64	1·0680165	1·3710863
65	1·4993581	1·8369320	65	1·2772976	1·5981325	65	1·0426591	1·3443648
66	1·4725285	1·8082305	66	1·2504680	1·5696080	66	1·0158295	1·3160438
67	1·4440754	1·7777421	67	1·2220149	1·5393083	67	0·9873764	1·2859622
68	1·4138373	1·7452989	68	1·1917768	1·5070662	68	0·9571383	1·2539556
69	1·3816420	1·7107197	69	1·1595815	1·4727068	69	0·9249430	1·2198412
70	1·3473074	1·6738196	70	1·1252469	1·4360354	70	0·8906084	1·1834435
71	1·3106408	1·6344017	71	1·0885803	1·3968599	71	0·8539418	1·1445493
72	1·2714392	1·5922578	72	1·0493787	1·3549723	72	0·8147402	1·1029617
73	1·2294895	1·5471764	73	1·0074290	1·3101536	73	0·7727905	1·0584603
74	1·1845679	1·4989250	74	0·9625074	1·2621876	74	0·7278689	1·0108129
75	1·1364406	1·4472775	75	0·9143801	1·2108266	75	0·6797416	0·9598043
76	1·0848632	1·3919790	76	0·8628027	1·1558369	76	0·6281642	0·9051642
77	1·0295813	1·3327817	77	0·8075208	1·0969517	77	0·5728823	0·8466587
78	0·9703299	1·2694195	78	0·7482694	1·0339100	78	0·5136309	0·7840036
79	0·9068338	1·2016265	79	0·6847733	0·9664421	79	0·4501348	0·7169294
80	0·8388074	1·1291128	80	0·6167469	0·8942662	80	0·3821084	0·6451471
81	0·7659548	1·0515924	81	0·5438943	0·8170892	81	0·3092558	0·5683778
82	0·6879697	0·9687630	82	0·4659092	0·7346078	82	0·2312707	0·4863171
83	0·6045358	0·8803219	83	0·3824753	0·6465116	83	0·1478368	0·3986517
84	0·5153260	0·7859346	84	0·2932655	0·5524857	84	0·0586270	0·3050503
85	0·4200032	0·6852669	85	0·1979427	0·4521853	85	9·9633042	0·2051773
86	0·3182198	0·5780085	86	0·0961593	0·3452561	86	9·8615208	0·0987129
87	0·2096180	0·4638034	87	9·9875575	0·2314186	87	9·7529190	$\bar{1}$·9852468
88	0·0938296	0·3423042	88	9·8717691	0·1102529	88	9·6371306	$\bar{1}$·8645111
89	9·9704762	0·2130926	89	9·7484157	$\bar{1}$·9814562	89	9·5137772	$\bar{1}$·7361574
90	9·8391687	0·0757659	90	9·6171082	$\bar{1}$·8445393	90	9·3824697	$\bar{1}$·5997739
91	9·6995082	$\bar{1}$·9301336	91	9·4774477	$\bar{1}$·6990569	91	9·2428092	$\bar{1}$·4548449
92	9·5510851	$\bar{1}$·7754648	92	9·3290246	$\bar{1}$·5450596	92	9·0943861	$\bar{1}$·3008128
93	9·3934796	$\bar{1}$·6116171	93	9·1714191	$\bar{1}$·3812956	93	8·9367806	$\bar{1}$·1383027
94	9·2262615	$\bar{1}$·4383841	94	9·0042010	$\bar{1}$·2081725	94	8·7695625	$\bar{2}$·9647309
95	9·0489904	$\bar{1}$·2547897	95	8·8269299	$\bar{1}$·0253059	95	8·5922914	$\bar{2}$·7817254
96	8·8612155	$\bar{1}$·0606978	96	8·6391550	$\bar{2}$·8318698	96	8·4045165	$\bar{2}$·5899496
97	8·6624756	$\bar{2}$·8555192	97	8·4404151	$\bar{2}$·6273659	97	8·2057766	$\bar{2}$·3856063
98	8·4522993	$\bar{2}$·6384893	98	8·2302388	$\bar{2}$·4099331	98	7·9956003	$\bar{2}$·1702617
99	8·2302049	$\bar{2}$·4099331	99	8·0081444	$\bar{2}$·1818436	99	7·7735059	$\bar{3}$·9395193
100	7·9957001	$\bar{2}$·1702617	100	7·7736396	$\bar{3}$·9395193	100	7·5390011	$\bar{3}$·6989700
101	7·7482826	$\bar{3}$·9138139	101	7·5262221	$\bar{3}$·6901961	101	7·2915836	$\bar{3}$·4471580
102	7·4874396	$\bar{3}$·6532125	102	7·2653791	$\bar{3}$·4149733	102	7·0307406	$\bar{3}$·1760913
103	7·2126480	$\bar{3}$·3424227	103	6·9905875	$\bar{3}$·1461280	103	6·7559490	$\bar{4}$·9030900
104	6·9233744	$\bar{3}$·0000000	104	6·7013139	$\bar{4}$·7781513	104	6·4666754	$\bar{4}$·6020600
105	6·6190750		105	6·3970145		105	6·1623760	
106	6·2991958		106	6·0771353		106	5·8424968	
107	5·9631724		107	5·7411119		107	5·5064734	
108	5·6104301		108	5·3883696		108	5·1537311	
109	5·2403838		109	5·0183233		109	4·7830848	

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Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	102		103			104		
Age of Male (x)	λ $D_{x,\,102}$	λ $N_{x,\,102}$	**Age of Male** (x)	λ $D_{x,\,103}$	λ $N_{x,\,103}$	**Age of Male** (x)	λ $D_{x,\,104}$	λ $N_{x,\,104}$
0	1·7429183	1·9932674	0	1·4815580	1.6973279	0	1·2060322	1·3590629
1	1·6589161	1·9342454	1	1·3975558	1·6348509	1	1·1220360	1·2901081
2	1·6236352	1·9064525	2	1·3622749	1·6058974	2	1·0867491	1·2590967
3	1·6015219	1·8875301	3	1·3401616	1·5864129	3	1·0646358	1·2386983
4	1·5846202	1·8723987	4	1·3232599	1·5709397	4	1·0477341	1·2226827
5	1·5703928	1·8593863	5	1·3090325	1·5576996	5	1·0335067	1·2090751
6	1·5580316	1·8478193	6	1·2966713	1·5459772	6	1·0211455	1·1971179
7	1·5468881	1·8372101	7	1·2855278	1·5352485	7	1·0100020	1·1862187
8	1·5364739	1·8272562	8	1·2751136	1·5252016	8	0·9995878	1·1760246
9	1·5267265	1·8178561	9	1·2653662	1·5157308	9	0·9898404	1·1664508
10	1·5174913	1·8088629	10	1·2561310	1·5066944	10	0·9806052	1·1573359
11	1·5086268	1·8001470	11	1·2472665	1·4979547	11	0·9717407	1·1485533
12	1·5000048	1·7915882	12	1·2386445	1·4893945	12	0·9631187	1·1399735
13	1·4915103	1·7830821	13	1·2301500	1·4809019	13	0·9546242	1·1314903
14	1·4830414	1·7745382	14	1·2216811	1·4723834	14	0·9461553	1·1230018
15	1·4745096	1·7658778	15	1·2131493	1·4637617	15	0·9376235	1·1144208
16	1·4658393	1·7570360	16	1·2044790	1·4549668	16	0·9289532	1·1056839
17	1·4569685	1·7479608	17	1·1956082	1·4459450	17	0·9200824	1·0967294
18	1·4478180	1·7386125	18	1·1864877	1·4366555	18	0·9109619	1·0875117
19	1·4384422	1·7289833	19	1·1770819	1·4270688	19	0·9015561	1·0780071
20	1·4287284	1·7190917	20	1·1673681	1·4172042	20	0·8918423	1·0681859
21	1·4186972	1·7089993	21	1·1573369	1·4071257	21	0·8818111	1·0581298
22	1·4085856	1·6988284	22	1·1472253	1·3969696	22	0·8716995	1·0479910
23	1·3983963	1·6885800	23	1·1370360	1·3867361	23	0·8615192	1·0377770
24	1·3881311	1·6782579	24	1·1267708	1·3764255	24	0·8512450	1·0274842
25	1·3777910	1·6678591	25	1·1164307	1·3660436	25	0·8409049	1·0171168
26	1·3673761	1·6573858	26	1·1060158	1·3555837	26	0·8304900	1·0066799
27	1·3568557	1·6468359	27	1·0955254	1·3450481	27	0·8199996	0·9961613
28	1·3463182	1·6362050	28	1·0849579	1·3344356	28	0·8094321	0·9855702
29	1·3356714	1·6254926	29	1·0743111	1·3237388	29	0·7987853	0·9748984
30	1·3249420	1·6146958	30	1·0635817	1·3129576	30	0·7880559	0·9641370
31	1·3141260	1·6038067	31	1·0527657	1·3020884	31	0·7772399	0·9532908
32	1·3032185	1·5928227	32	1·0418582	1·2911223	32	0·7663324	0·9423504
33	1·2922138	1·5817335	33	1·0308535	1·2800591	33	0·7553277	0·9313104
34	1·2811054	1·5705383	34	1·0197451	1·2688798	34	0·7442193	0·9201703
35	1·2698859	1·5592229	35	1·0085256	1·2575922	35	0·7329998	0·9089030
36	1·2585471	1·5477809	36	0·9971868	1·2461759	36	0·7216610	0·8975281
37	1·2470799	1·5362048	37	0·9857196	1·2346261	37	0·7101938	0·8860110
38	1·2354745	1·5244805	38	0·9741142	1·2229349	38	0·6985884	0·8743542
39	1·2237201	1·5125977	39	0·9623598	1·2110831	39	0·6868340	0·8625488
40	1·2118053	1·5005480	40	0·9504450	1·1990665	40	0·6749192	0·8505727
41	1·1997176	1·4883109	41	0·9383573	1·1868716	41	0·6628315	0·8384272
42	1·1874438	1·4758789	42	0·9260835	1·1744785	42	0·6505577	0·8260878
43	1·1749698	1·4632328	43	0·9136095	1·1618769	43	0·6380837	0·8135410
44	1·1622809	1·4503615	44	0·9009206	1·1490497	44	0·6253948	0·8007789
45	1·1493612	1·4372478	45	0·8880009	1·1359845	45	0·6124751	0·7877721
46	1·1361942	1·4238715	46	0·8748339	1·1226647	46	0·5993081	0·7745170
47	1·1227625	1·4102169	47	0·8614022	1·1090653	47	0·5858764	0·7609951
48	1·1090479	1·3962639	48	0·8476876	1·0951729	48	0·5721618	0·7471787
49	1·0950313	1·3819774	49	0·8336710	1·0809654	49	0·5581452	0·7330527
50	1·0806929	1·3673130	50	0·8193326	1·0663930	50	0·5438068	0·7186013
51	1·0660119	1·3522172	51	0·8046516	1·0513803	51	0·5291258	0·7037212
52	1·0507222	1·3365818	52	0·7893619	1·0358378	52	0·5138361	0·6882774
53	1·0349877	1·3204869	53	0·7736274	1·0198305	53	0·4981016	0·6724027
54	1·0187911	1·3039042	54	0·7574308	1·0033485	54	0·4819050	0·6560407

ENGLISH LIFE TABLE, No. 3.

JOINT LIVES:—MALE AND FEMALE LIFE.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of Female (y)	102		103			104		
Age of Male (x)	$\lambda\, D_{x,\,102}$	$\lambda\, N_{x,\,102}$	Age of Male (x)	$\lambda\, D_{x,\,103}$	$\lambda\, N_{x,\,103}$	Age of Male (x)	$\lambda\, D_{x,\,104}$	$\lambda\, N_{x,\,104}$
55	1·0021052	1·2868022	55	0·7407449	0·9863507	55	0·4652191	0·6391776
56	0·9848923	1·2691345	56	0·7235320	0·9688004	56	0·4480062	0·6217785
57	0·9671043	1·2508444	57	0·7057440	0·9506423	57	0·4302182	0·6037829
58	0·9486828	1·2318645	58	0·6873225	0·9318086	58	0·4117967	0·5851335
59	0·9295592	1·2121210	59	0·6681989	0·9122221	59	0·3926731	0·5657534
60	0·9096544	1·1915292	60	0·6482941	0·8918050	60	0·3727683	0·5455545
61	0·8888791	1·1699946	61	0·6275188	0·8704624	61	0·3519930	0·5244610
62	0·8671336	1·1473980	62	0·6057733	0·8480905	62	0·3302475	0·5023588
63	0·8443079	1·1236394	63	0·5829476	0·8245619	63	0·3074218	0·4791577
64	0·8202817	1·0985780	64	0·5589214	0·7997677	64	0·2833956	0·4546772
65	0·7949243	1·0720881	65	0·5335640	0·7735597	65	0·2580382	0·4288472
66	0·7680947	1·0440104	66	0·5067344	0·7458006	66	0·2312086	0·4014867
67	0·7396416	1·0141970	67	0·4782813	0·7163206	67	0·2027555	0·3724701
68	0·7094035	0·9824748	68	0·4480132	0·6849710	68	0·1725174	0·3415928
69	0·6772082	0·9486721	69	0·4158479	0·6515591	69	0·1403221	0·3087138
70	0·6428736	0·9125940	70	0·3815133	0·6159185	70	0·1059875	0·2736262
71	0·6062070	0·8740583	71	0·3448167	0·5778249	71	0·0693209	0·2361592
72	0·5670054	0·8328409	72	0·3056151	0·5371010	72	0·0301193	0·1960656
73	0·5250557	0·7887339	73	0·2636954	0·4935138	73	9·9881696	0·1531744
74	0·4801341	0·7415061	74	0·2187738	0·4468322	74	9·9432480	0·1072439
75	0·4320068	0·6909134	75	0·1706465	0·3968268	75	9·8951207	0·0580462
76	0·3804294	0·6367386	76	0·1190691	0·3432313	76	9·8435433	0·0053092
77	0·3251475	0·5786965	77	0·0637872	0·2858497	77	9·7882614	$\bar{1}$·9487552
78	0·2658961	0·5165486	78	0·0045358	0·2243517	78	9·7290100	$\bar{1}$·8882357
79	0·2024000	0·4499872	79	9·9410397	0·1585133	79	9·6655139	$\bar{1}$·8233438
80	0·1343736	0·3787249	80	9·8730133	0·0879943	80	9·5974875	$\bar{1}$·7538893
81	0·0615210	0·3024825	81	9·8001607	0·0124998	81	9·5246349	$\bar{1}$·6795187
82	9·9835359	0·2209706	82	9·7221756	$\bar{1}$·9317121	82	9·4466498	$\bar{1}$·5998831
83	9·9001020	0·1338581	83	9·6387117	$\bar{1}$·8454081	83	9·3632159	$\bar{1}$·5146805
84	9·8108922	0·0408396	84	9·5495319	$\bar{1}$·7531999	84	9·2740061	$\bar{1}$·4235735
85	9·7155694	$\bar{1}$·9415611	85	9·4542091	$\bar{1}$·6547539	85	9·1786833	$\bar{1}$·3265407
86	9·6137860	$\bar{1}$·8356272	86	9·3524257	$\bar{1}$·5497387	86	9·0768999	$\bar{1}$·2227165
87	9·5051842	$\bar{1}$·7227984	87	9·2435239	$\bar{1}$·4377506	87	8·9682981	$\bar{1}$·1122698
88	9·3893958	$\bar{1}$·6026025	88	9·1280355	$\bar{1}$·3184807	88	8·8525097	$\bar{2}$·9943172
89	9·2660424	$\bar{1}$·4747988	89	9·0046821	$\bar{1}$·1914510	89	8·7291563	$\bar{2}$·8686444
90	9·1347349	$\bar{1}$·3390537	90	8·8733746	$\bar{1}$·0565237	90	8·5978488	$\bar{2}$·7347998
91	8·9950744	$\bar{1}$·1947918	91	8·7337141	$\bar{2}$·9132839	91	8·4581883	$\bar{2}$·5932861
92	8·8466513	$\bar{1}$·0417873	92	8·5852910	$\bar{2}$·7611758	92	8·3097652	$\bar{2}$·4424798
93	8·6890458	$\bar{2}$·8785218	93	8·4276855	$\bar{2}$·5998831	93	8·1521597	$\bar{2}$·2833012
94	8·5218277	$\bar{2}$·7075702	94	8·2604674	$\bar{2}$·4265113	94	7·9849416	$\bar{2}$·1139434
95	8·3445566	$\bar{2}$·5237465	95	8·0831963	$\bar{2}$·2479733	95	7·8076705	$\bar{3}$·9294189
96	8·1567817	$\bar{2}$·3304138	96	7·8954214	$\bar{2}$·0530784	96	7·6198956	$\bar{3}$·7481880
97	7·9580418	$\bar{2}$·1303338	97	7·6966815	$\bar{3}$·8512583	97	7·4211557	$\bar{3}$·5314789
98	7·7478655	$\bar{3}$·9138139	98	7·4865052	$\bar{3}$·6434527	98	7·2109794	$\bar{3}$·3222193
99	7·5257711	$\bar{3}$·6901961	99	7·2644108	$\bar{3}$·4149733	99	6·9888850	$\bar{3}$·1139434
100	7·2912663	$\bar{3}$·4471580	100	7·0299060	$\bar{3}$·1760913	100	6·7543802	$\bar{4}$·9030900
101	7·0438488	$\bar{3}$·1760913	101	6·7824885	$\bar{4}$·9030900	101	6·5069627	$\bar{4}$·6020600
102	6·7830058	$\bar{4}$·9030900	102	6·5216455	$\bar{4}$·6020600	102	6·2461197	$\bar{4}$·3010300
103	6·5082142	$\bar{4}$·6020600	103	6·2468539	$\bar{4}$·3010300	103	5·9713281	
104	6·2189406	$\bar{4}$·3010300	104	5·9575803		104	5·6820545	
105	5·9146412		105	5·6532809		105	5·3777551	
106	5·5947620		106	5·3334017		106	5·0578759	
107	5·2587386		107	4·9973783		107	4·7218525	
108	4·9059963		108	4·6446360		108	4·3691102	
109	4·5359500		109	4·2745897		109	3·9990639	

JOINT LIVES:—MALE AND FEMALE LIFE.

Equal Ages.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	Equal Ages.		x	y	Equal Ages.	
0	0	2,498,621	32,445,916	55	55	87,233·5	849,110·0
1	1	1,755,658	29,947,295	56	56	80,880·5	761,876·5
2	2	1,496,171	28,191,637	57	57	74,786·6	680,996·0
3	3	1,351,465	26,695,466	58	58	68,948·9	606,209·4
4	4	1,249,843	25,344,001	59	59	63,363·5	537,260·5
5	5	1,170,744	24,094,158	60	60	58,025·7	473,897·0
6	6	1,106,311	22,923,414	61	61	52,931·2	415,871·3
7	7	1,051,254	21,817,103	62	62	48,076·7	362,940·1
8	8	1,002,107	20,765,849	63	63	43,459·6	314,863·4
9	9	958,071	19,763,742	64	64	39,078·9	271,403·8
10	10	918,037	18,805,671	65	65	34,935·1	232,324·9
11	11	881,106	17,887,634	66	66	31,029·7	197,389·8
12	12	846,555	17,006,528	67	67	27,365·4	166,360·1
13	13	813,801	16,159,973	68	68	23,945·8	138,994·7
14	14	782,387	15,346,172	69	69	20,774·4	115,048·9
15	15	751,958	14,563,785	70	70	17,854·6	94,274·5
16	16	722,251	13,811,827	71	71	15,188·8	76,419·9
17	17	693,084	13,089,576	72	72	12,777·7	61,231·1
18	18	664,342	12,396,492	73	73	10,620·0	48,453·4
19	19	635,969	11,732,150	74	74	8,711·74	37,833·40
20	20	607,960	11,096,181	75	75	7,045·89	29,121·66
21	21	580,350	10,488,221	76	76	5,612·28	22,075·77
22	22	553,766	9,907,871	77	77	4,397·61	16,463·49
23	23	528,192	9,354,105	78	78	3,385·69	12,065·88
24	24	503,604	8,825,913	79	79	2,557·92	8,680·19
25	25	479,981	8,322,309	80	80	1,893·99	6,122·27
26	26	457,295	7,842,328	81	81	1,372·55	4,228·28
27	27	435,520	7,385,033	82	82	972·162	2,855·734
28	28	414,627	6,949,513	83	83	672·016	1,883·572
29	29	394,589	6,534,886	84	84	452·692	1,211·556
30	30	375,375	6,140,297	85	85	296·715	758·864
31	31	356,957	5,764,922	86	86	188·929	462·149
32	32	339,304	5,407,965	87	87	116·672	273·220
33	33	322,389	5,068,661	88	88	69·7611	156·5476
34	34	306,181	4,746,272	89	89	40·3164	86·7865
35	35	290,653	4,440,091	90	90	22·4801	46·4701
36	36	275,778	4,149,438	91	91	12·0715	23·9900
37	37	261,529	3,873,660	92	92	6·2310	11·9185
38	38	247,880	3,612,131	93	93	3·0857	5·6875
39	39	234,807	3,364,251	94	94	1·4631	2·6018
40	40	222,286	3,129,444	95	95	·6629	1·1387
41	41	210,293	2,907,158	96	96	·2864	·4758
42	42	198,808	2,696,865	97	97	·1177	·1894
43	43	187,809	2,498,057	98	98	·0460	·0717
44	44	177,277	2,310,248	99	99	·0170	·0257
45	45	167,194	2,132,971	100	100	·0059	·0087
46	46	157,541	1,965,777	101	101	·0020	·0028
47	47	148,303	1,808,236	102	102	·0006	·0008
48	48	139,463	1,659,933	103	103	·0002	·0002
49	49	131,007	1,520,470	104	104	·0000	·0000
50	50	122,922	1,389,463	105	105	·0000	·0000
51	51	115,195	1,266,541				
52	52	107,752	1,151,346				
53	53	100,638	1,043,594				
54	54	93,846·1	942,956·1				

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 1 Year older than Female.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 1 Year older.**		x	y	**Male 1 Year older.**	
1	0	2,059,198	31,108,770	56	55	83,843·7	802,239·3
2	1	1,618,673	29,049,572	57	56	77,634·7	718,395·6
3	2	1,421,897	27,430,899	58	57	71,680·7	640,760·9
4	3	1,299,880	26,009,002	59	58	65,978·7	569,080·2
5	4	1,209,562	24,709,122	60	59	60,524·9	503,101·5
6	5	1,137,891	23,499,560	61	60	55,315·3	442,576·6
7	6	1,078,285	22,361,669	62	61	50,346·2	387,261·3
8	7	1,026,346	21,283,384	63	62	45,615·1	336,915·1
9	8	979,866	20,257,038	64	63	41,120·6	291,300·0
10	9	937,913	19,277,172	65	64	36,862·6	250,179·4
11	10	899,488	18,339,259	66	65	32,842·2	213,316·8
12	11	863,786	17,439,771	67	66	29,061·9	180,474·6
13	12	830,158	16,575,985	68	67	25,524·9	151,412·7
14	13	798,085	15,745,827	69	68	22,234·8	125,887·8
15	14	767,167	14,947,742	70	69	19,195·3	103,653·0
16	15	737,095	14,180,575	71	70	16,409·1	84,457·7
17	16	707,648	13,443,480	72	71	13,877·8	68,048·6
18	17	678,681	12,735,832	73	72	11,601·2	54,170·8
19	18	650,109	12,057,151	74	73	9,576·41	42,569·62
20	19	621,903	11,407,042	75	74	7,797·90	32,993·21
21	20	594,079	10,785,139	76	75	6,256·89	25,195·31
22	21	566,994	10,191,060	77	76	4,941·49	18,938·42
23	22	540,925	9,624,066	78	77	3,836·77	13,996·93
24	23	515,854	9,083,141	79	78	2,925·17	10,160·16
25	24	491,756	8,567,287	80	79	2,187·06	7,234·99
26	25	468,607	8,075,531	81	80	1,601·49	5,047·93
27	26	446,381	7,606,924	82	81	1,146·95	3,446·44
28	27	425,050	7,160,543	83	82	802·241	2,299·486
29	28	404,586	6,735,493	84	83	547·230	1,497·245
30	29	384,960	6,330,907	85	84	363·479	950·015
31	30	366,142	5,945,947	86	85	234·723	586·536
32	31	348,103	5,579,805	87	86	147·128	351·813
33	32	330,815	5,231,702	88	87	89·3673	204·6850
34	33	314,247	4,900,887	89	88	52·5121	115·3177
35	34	298,372	4,586,640	90	89	29·7971	62·8056
36	35	283,163	4,288,268	91	90	16·2981	33·0085
37	36	268,592	4,005,105	92	91	8·5771	16·7104
38	37	254,633	3,736,513	93	92	4·3346	8·1333
39	38	241,261	3,481,880	94	93	2·0996	3·7987
40	39	228,453	3,240,619	95	94	·9727	1·6991
41	40	216,184	3,012,166	96	95	·4302	·7264
42	41	204,433	2,795,982	97	96	·1812	·2962
43	42	193,179	2,591,549	98	97	·0726	·1150
44	43	182,401	2,398,370	99	98	·0276	·0424
45	44	172,081	2,215,969	100	99	·0099	·0148
46	45	162,201	2,043,888	101	100	·0034	·0049
47	46	152,743	1,881,687	102	101	·0011	·0015
48	47	143,692	1,728,944	103	102	·0003	·0004
49	48	135,034	1,585,252	104	103	·0001	·0001
50	49	126,753	1,450,218	105	104	·0000	·0000
51	50	118,836	1,323,465				
52	51	111,209	1,204,629				
53	52	103,918	1,093,420				
54	53	96,954·2	989,502·4				
55	54	90,308·9	892,548·2				

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 2 Years older than Female.

Male 105 Years older than Female.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	*y*	**Male 2 Years older.**		*x*	*y*	**Male 2 Years older.**	
2	0	1,898,529	30,160,450	57	55	80,479·0	756,088·9
3	1	1,538,317	28,261,921	58	56	74,410·5	675,609·9
4	2	1,367,623	26,723,604	59	57	68,592·8	601,199·4
5	3	1,257,986	25,355,981	60	58	63,023·0	532,606·6
6	4	1,175,620	24,097,995	61	59	57,697·7	469,583·6
7	5	1,109,065	22,922,375	62	60	52,613·8	411,885·9
8	6	1,052,736	21,813,310	63	61	47,768·4	359,272·1
9	7	1,003,566	20,760,574	64	62	43,160·1	311,503·7
10	8	959,249	19,757,008	65	63	38,788·4	268,343·6
11	9	918,963	18,797,759	66	64	34,654·2	229,555·2
12	10	881,807	17,878,796	67	65	30,759·5	194,901·0
13	11	847,055	16,996,989	68	66	27,107·3	164,141·5
14	12	814,126	16,149,934	69	67	23,701·1	137,034·2
15	13	782,560	15,335,808	70	68	20,544·7	113,333·1
16	14	752,003	14,553,248	71	69	17,641·2	92,788·4
17	15	722,192	13,801,245	72	70	14,992·8	75,147·2
18	16	692,942	13,079,053	73	71	12,600·0	60,154·4
19	17	664,140	12,386,111	74	72	10,461·2	47,554·4
20	18	635,729	11,721,971	75	73	8,571·87	37,093·21
21	19	607,703	11,086,242	76	74	6,924·68	28,521·34
22	20	580,406	10,478,539	77	75	5,509·05	21,596·66
23	21	553,846	9,898,133	78	76	4,311·28	16,087·61
24	22	528,290	9,344,287	79	77	3,314·89	11,776·33
25	23	503,717	8,815,997	80	78	2,501·06	8,461·44
26	24	480,103	8,312,280	81	79	1,849·31	5,960·38
27	25	457,423	7,832,177	82	80	1,338·25	4,111·07
28	26	435,651	7,374,754	83	81	946·476	2,772·822
29	27	414,757	6,939,103	84	82	653·273	1,826·346
30	28	394,713	6,524,346	85	83	439·387	1,173·073
31	29	375,491	6,129,633	86	84	287·539	733·686
32	30	357,061	5,754,142	87	85	182·791	446·147
33	31	339,394	5,397,081	88	86	112·696	263·356
34	32	322,460	5,057,687	89	87	67·2706	150·6595
35	33	306,233	4,735,227	90	88	38·8108	83·3889
36	34	290,683	4,428,994	91	89	21·6030	44·5781
37	35	275,784	4,138,311	92	90	11·5801	22·9751
38	36	261,509	3,862,527	93	91	5·9667	11·3950
39	37	247,834	3,601,018	94	92	2·9494	5·4283
40	38	234,732	3,353,184	95	93	1·3959	2·4789
41	39	222,182	3,118,452	96	94	·6313	1·0830
42	40	210,160	2,896,270	97	95	·2722	·4517
43	41	198,645	2,686,110	98	96	·1117	·1795
44	42	187,616	2,487,465	99	97	·0435	·0678
45	43	177,055	2,299,849	100	98	·0161	·0243
46	44	166,942	2,122,794	101	99	·0056	·0082
47	45	157,261	1,955,852	102	100	·0018	·0026
48	46	147,995	1,798,591	103	101	·0006	·0008
49	47	139,129	1,650,596	104	102	·0002	·0002
50	48	130,648	1,511,467	105	103	·0000	·0000
51	49	122,539	1,380,819				
52	50	114,725	1,258,280				
53	51	107,253	1,143,555			**Male 105 Years older.**	
54	52	100,114	1,036,302				
55	53	93,299·8	936,188·3				
56	54	86,799·6	842,888·5	105	0	3·7104	3·7104

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 3 Years older than Female.

Male 104 Years older than Female.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 3 Years older.**	
3	0	1,804,280	29,334,926
4	1	1,479,599	27,530,646
5	2	1,323,546	26,051,047
6	3	1,222,685	24,727,501
7	4	1,145,839	23,504,816
8	5	1,082,787	22,358,977
9	6	1,029,371	21,276,190
10	7	982,451	20,246,819
11	8	939,868	19,264,368
12	9	900,899	18,324,500
13	10	864,727	17,423,601
14	11	830,698	16,558,874
15	12	798,288	15,728,176
16	13	767,092	14,929,888
17	14	736,798	14,162,796
18	15	707,183	13,425,998
19	16	678,096	12,718,815
20	17	649,451	12,040,719
21	18	621,214	11,391,268
22	19	593,717	10,770,054
23	20	566,948	10,176,337
24	21	540,908	9,609,389
25	22	515,860	9,068,481
26	23	491,781	8,552,621
27	24	468,645	8,060,840
28	25	446,427	7,592,195
29	26	425,100	7,145,768
30	27	404,635	6,720,668
31	28	385,004	6,316,033
32	29	366,178	5,931,029
33	30	348,127	5,564,851
34	31	330,823	5,216,724
35	32	314,237	4,885,901
36	33	298,341	4,571,664
37	34	283,108	4,273,323
38	35	268,512	3,990,215
39	36	254,526	3,721,703
40	37	241,127	3,467,177
41	38	228,289	3,226,050
42	39	215,991	2,997,761
43	40	204,210	2,781,770
44	41	192,925	2,577,560
45	42	182,117	2,384,635
46	43	171,767	2,202,518
47	44	161,858	2,030,751
48	45	152,372	1,868,893
49	46	143,295	1,716,521
50	47	134,610	1,573,226
51	48	126,306	1,438,616
52	49	118,300	1,312,310
53	50	110,643	1,194,010
54	51	103,326	1,083,367
55	52	96,340·5	980,040·6
56	53	89,674·2	883,700·1
57	54	83,316·2	794,025·9
58	55	77,136·7	710,709·7
59	56	71,205·0	633,573·0
60	57	65,520·0	562,368·0
61	58	60,079·1	496,848·0
62	59	54,879·9	436,768·9
63	60	49,919·9	381,889·0
64	61	45,197·5	331,969·1
65	62	40,712·3	286,771·6
66	63	36,464·7	246,059·3
67	64	32,456·6	209,594·6
68	65	28,690·7	177,138·0
69	66	25,170·4	148,447·3
70	67	21,899·5	123,276·9
71	68	18,881·3	101,377·4
72	69	16,118·5	82,496·1
73	70	13,612·3	66,377·6
74	71	11,361·9	52,765·3
75	72	9,363·82	41,403·41
76	73	7,611·99	32,039·59
77	74	6,097·03	24,427·60
78	75	4,806·46	18,330·57
79	76	3,724·86	13,524·11
80	77	2,834·28	9,799·25
81	78	2,114·81	6,964·97
82	79	1,545·34	4,850·16
83	80	1,104·35	3,304·82
84	81	770·726	2,200·470
85	82	524·532	1,429·744
86	83	347·587	905·212
87	84	223·921	557·625
88	85	140·012	333·704
89	86	84·8309	193·6924
90	87	49·7184	108·8615
91	88	28·1379	59·1431
92	89	15·3494	31·0052
93	90	8·0558	15·6558
94	91	4·0599	7·6000
95	92	1·9609	3·5401
96	93	·9059	1·5792
97	94	·3995	·6733
98	95	·1678	·2738
99	96	·0670	·1060
100	97	·0254	·0390
101	98	·0091	·0136
102	99	·0031	·0045
103	100	·0010	·0014
104	101	·0003	·0004
105	102	·0001	·0001
		Male 104 Years older.	
104	0	7·4769	10·6404
105	1	3·1635	3·1635

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 4 Years older than Female.

Male 103 Years older than Female.

Ages		$D_{x,y}$	$N_{x,y}$	Ages		$D_{x,y}$	$N_{x,y}$
x	*y*	**Male 4 Years older.**		*x*	*y*	**Male 4 Years older.**	
4	0	1,735,410	28,571,295	59	55	73,813·8	666,159·0
5	1	1,431,913	26,835,885	60	56	68,015·2	592,345·2
6	2	1,286,405	25,403,972	61	57	62,459·5	524,330·0
7	3	1,191,711	24,117,567	62	58	57,145·0	461,870·5
8	4	1,118,689	22,925,856	63	59	52,070·0	404,725·5
9	5	1,058,755	21,807,167	64	60	47,233·2	352,655·5
10	6	1,007,713	20,748,412	65	61	42,634·1	305,422·3
11	7	962,601	19,740,699	66	62	38,273·3	262,788·2
12	8	921,393	18,778,098	67	63	34,152·3	224,514·9
13	9	883,449	17,856,705	68	64	30,273·6	190,362·6
14	10	848,028	16,973,256	69	65	26,640·7	160,089·0
15	11	814,538	16,125,228	70	66	23,257·1	133,448·3
16	12	782,509	15,310,690	71	67	20,126·5	110,191·2
17	13	751,582	14,528,181	72	68	17,251·7	90,064·7
18	14	721,486	13,776,599	73	69	14,634·4	72,813·0
19	15	692,032	13,055,113	74	70	12,274·7	58,178·6
20	16	663,098	12,363,081	75	71	10,170·0	45,903·9
21	17	634,622	11,699,983	76	72	8,315·26	35,733·88
22	18	606,917	11,065,361	77	73	6,702·18	27,418·62
23	19	579,950	10,458,444	78	74	5,319·45	20,716·44
24	20	553,704	9,878,494	79	75	4,152·68	15,396·99
25	21	528,182	9,324,790	80	76	3,184·81	11,244·31
26	22	503,636	8,796,608	81	77	2,396·57	8,059·50
27	23	480,044	8,292,972	82	78	1,767·20	5,662·93
28	24	457,379	7,812,928	83	79	1,275·23	3,895·73
29	25	435,616	7,355,549	84	80	899·281	2,620·502
30	26	414,727	6,919,933	85	81	618·838	1,721·221
31	27	394,683	6,505,206	86	82	414·943	1,102·383
32	28	375,455	6,110,523	87	83	270·683	687·440
33	29	357,016	5,735,068	88	84	171·517	416·757
34	30	339,335	5,378,052	89	85	105·393	245·240
35	31	322,386	5,038,717	90	86	62·6970	139·8473
36	32	306,139	4,716,331	91	87	36·0460	77·1503
37	33	290,567	4,410,192	92	88	19·9926	41·1043
38	34	275,643	4,119,625	93	89	10·6779	21·1117
39	35	261,342	3,843,982	94	90	5·4814	10·4338
40	36	247,639	3,582,640	95	91	2·6993	4·9524
41	37	234,508	3,335,001	96	92	1·2726	2·2531
42	38	221,928	3,100,493	97	93	·5732	·9805
43	39	209,875	2,878,565	98	94	·2462	·4073
44	40	198,329	2,668,690	99	95	·1006	·1611
45	41	187,270	2,470,361	100	96	·0390	·0605
46	42	176,679	2,283,091	101	97	·0143	·0215
47	43	166,536	2,106,412	102	98	·0050	·0072
48	44	156,827	1,939,876	103	99	·0016	·0022
49	45	147,533	1,783,049	104	100	·0005	·0006
50	46	138,641	1,635,516	105	101	·0001	·0001
51	47	130,136	1,496,875				
52	48	121,936	1,366,739				
53	49	114,091	1,244,803			**Male 103 Years older.**	
54	50	106,593	1,130,712				
55	51	99,431·9	1,024,119·3				
56	52	92,596·8	924,687·4	103	0	14·5545	23·8534
57	53	86,075·5	832,090·6	104	1	6·3748	9·2989
58	54	79,856·1	746,015·1	105	2	2·9241	2·9241

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 5 Years older than Female.

Male 102 Years older than Female.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Male 5 Years older.**	
5	0	1,679,480	27,847,363
6	1	1,391,731	26,167,883
7	2	1,253,817	24,776,152
8	3	1,163,475	23,522,335
9	4	1,093,861	22,358,860
10	5	1,036,479	21,264,999
11	6	987,353	20,228,520
12	7	943,679	19,241,167
13	8	903,546	18,297,488
14	9	866,388	17,393,942
15	10	831,531	16,527,554
16	11	798,437	15,696,023
17	12	766,688	14,897,586
18	13	735,963	14,130,898
19	14	706,028	13,394,935
20	15	676,725	12,688,907
21	16	647,957	12,012,182
22	17	620,017	11,364,225
23	18	592,844	10,744,208
24	19	566,403	10,151,364
25	20	540,677	9,584,961
26	21	515,666	9,044,284
27	22	491,617	8,528,618
28	23	468,504	8,037,001
29	24	446,303	7,568,497
30	25	424,986	7,122,194
31	26	404,526	6,697,208
32	27	384,893	6,292,682
33	28	366,061	5,907,789
34	29	348,000	5,541,728
35	30	330.681	5,193,728
36	31	314,078	4,863,047
37	32	298,161	4,548,969
38	33	282,905	4,250,808
39	34	268,283	3,967,903
40	35	254,270	3,699,620
41	36	240,841	3,445,350
42	37	227,973	3,204,509
43	38	215,644	2,976,536
44	39	203,832	2,760,892
45	40	192,516	2,557,060
46	41	181,678	2,364,544
47	42	171,298	2,182,866
48	43	161,359	2,011,568
49	44	151,846	1,850,209
50	45	142,742	1,698,363
51	46	134,033	1,555,621
52	47	125,634	1,421,588
53	48	117,598	1,295,954
54	49	109,915	1,178,356
55	50	102,575	1,068,441
56	51	95,568·1	965,865·8
57	52	88,880·8	870,297·7
58	53	82,500·8	781,416·9
59	54	76,416·0	698,916·1
60	55	70,507·1	622,500·1
61	56	64,838·1	551,993·0
62	57	59,409·1	487,154·9
63	58	54,219·1	427,745·8
64	59	49,267·6	373,526·7
65	60	44,554·4	324,259·1
66	61	40,080·0	279,704·7
67	62	35,846·1	239,624·7
68	63	31,855·3	203,778·6
69	64	28,110·5	171,923·3
70	65	24,615·6	143,812·8
71	66	21,374·2	119,197·2
72	67	18,389·3	97,823·0
73	68	15,663·2	79,433·7
74	69	13,196·4	63,770·5
75	70	10,987·1	50,574·1
76	71	9,031·18	39,587·01
77	72	7,321·40	30,555·83
78	73	5,847·43	23,234·43
79	74	4,595·90	17,387·00
80	75	3,550·61	12,791·10
81	76	2,692·97	9,240·49
82	77	2,002·65	6,547·52
83	78	1,458·32	4,544·87
84	79	1,038·44	3,086·55
85	80	722·059	2,048·114
86	81	489·546	1,326·055
87	82	323·137	836·509
88	83	207·335	513·372
89	84	129·108	306·037
90	85	77·8941	176·9288
91	86	45·4555	99·0347
92	87	25·6114	53·5792
93	88	13·9079	27·9678
94	89	7·2655	14·0599
95	90	3·6443	6·7944
96	91	1·7517	3·1501
97	92	·8053	1·3984
98	93	.3533	·5931
99	94	.1476	·2398
100	95	·0586	·0922
101	96	·0221	·0336
102	97	·0079	·0115
103	98	·0026	·0036
104	99	·0008	·0010
105	100	·0002	·0002
		Male 102 Years older.	
102	0	27·4024	48·4829
103	1	12·4090	21·0805
104	2	5·8923	8·6715
105	3	2·7792	2·7792

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 6 Years older than Female.

Male 101 Years older than Female.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Male 6 Years older.**	
6	0	1,632,351	27,152,419
7	1	1,356,475	25,520,068
8	2	1,224,109	24,163,593
9	3	1,137,652	22,939,484
10	4	1,070,845	21,801,832
11	5	1,015,537	20,730,987
12	6	967,944	19,715,450
13	7	925,401	18,747,506
14	8	886,098	17,822,105
15	9	849,534	16,936,007
16	10	815,095	16,086,473
17	11	782,294	15,271,378
18	12	750,755	14,489,084
19	13	720,195	13,738,329
20	14	690,412	13,018,134
21	15	661,273	12,327,722
22	16	633,045	11,666,449
23	17	605,639	11,033,404
24	18	578,995	10,427,765
25	19	553,076	9,848,770
26	20	527,865	9,295,694
27	21	503,360	8,767,829
28	22	479,799	8,264,469
29	23	457,159	7,784,670
30	24	435,412	7,327,511
31	25	414,533	6,892,099
32	26	394,492	6,477,566
33	27	375,263	6,083,074
34	28	356,817	5,707,811
35	29	339,125	5,350,994
36	30	322,159	5,011,869
37	31	305,893	4,689,710
38	32	290,299	4,383,817
39	33	275,351	4,093,518
40	34	261,023	3,818,167
41	35	247,290	3,557,144
42	36	234,130	3,309,854
43	37	221,519	3,075,724
44	38	209,435	2,854,205
45	39	197,858	2,644,770
46	40	186,767	2,446,912
47	41	176,145	2,260,145
48	42	165,973	2,084,000
49	43	156,235	1,918,027
50	44	146,915	1,761,792
51	45	137,997	1,614,877
52	46	129,396	1,476,880
53	47	121,164	1,347,484
54	48	113,293	1,226,320
55	49	105,772	1,113,027
56	50	98,589·3	1,007,255·1
57	51	91,732·8	908,665·8
58	52	85,189·5	816,933·0
59	53	78,946·8	731,743·5
60	54	72,992·7	652,796·7
61	55	67,213·6	579,804·0
62	56	61,671·6	512,590·4
63	57	56,367·3	450,918·8
64	58	51,301·1	394,551·5
65	59	46,473·4	343,250·4
66	60	41,885·2	296,777·0
67	61	37,538·3	254,891·8
68	62	33,435·2	217,353·5
69	63	29,579·2	183,918·3
70	64	25,973·8	154,339·1
71	65	22,622·7	128,365·3
72	66	19,529·3	105,742·6
73	67	16,696·1	86,213·3
74	68	14,124·1	69,517·2
75	69	11,812·1	55,393·1
76	70	9,756·77	43,580·98
77	71	7,951·75	33,824·21
78	72	6,387·67	25,872·46
79	73	5,052·06	19,484·79
80	74	3,929·56	14,432·73
81	75	3,002·27	10,503·17
82	76	2,250·33	7,500·90
83	77	1,652·61	5,250·57
84	78	1,187·53	3,597·96
85	79	833·791	2,410·431
86	80	571·201	1,576·640
87	81	381·234	1,005·439
88	82	247·513	624·205
89	83	156·070	376·692
90	84	95·4213	220·6215
91	85	56·4734	125·2002
92	86	32·2971	68·7268
93	87	17·8167	36·4297
94	88	9·4634	18·6130
95	89	4·8305	9·1496
96	90	2·3651	4·3191
97	91	1·1085	1·9540
98	92	·4963	·8455
99	93	·2119	·3492
100	94	·0860	·1373
101	95	·0332	·0513
102	96	·0121	·0181
103	97	·0042	·0060
104	98	·0014	·0018
105	99	·0004	·0004
		Male 101 Years older.	
101	0	49·9610	93·0667
102	1	23·3631	43·1057
103	2	11·4699	19·7426
104	3	5·6005	8·2727
105	4	2·6722	2·6722

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 7 Years older than Female.

Male 100 Years older than Female.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Male 7 Years older.**	
7	0	1,591,000	26,479,231
8	1	1,324,335	24,888,231
9	2	1,196,941	23,563,896
10	3	1,113,716	22,366,955
11	4	1,049,209	21,253,239
12	5	995,574	20,204,030
13	6	949,196	19,208,456
14	7	907,530	18,259,260
15	8	868,860	17,351,730
16	9	832,742	16,482,870
17	10	798,615	15,650,128
18	11	766,037	14,851,513
19	12	734,670	14,085,476
20	13	704,265	13,350,806
21	14	674,648	12,646,541
22	15	646,055	11,971,893
23	16	618,366	11,325,838
24	17	591,492	10,707,472
25	18	565,373	10,115,980
26	19	539,971	9,550,607
27	20	515,267	9,010,636
28	21	491,259	8,495,369
29	22	468,179	8,004,110
30	23	446,003	7,535,931
31	24	424,702	7,089,928
32	25	404,251	6,665,226
33	26	384,622	6,260,975
34	27	365,786	5,876,353
35	28	347,717	5,510,567
36	29	330,385	5,162,850
37	30	313,764	4,832,465
38	31	297,827	4,518,701
39	32	282,547	4,220,874
40	33	267,899	3,938,327
41	34	253,858	3,670,428
42	35	240,399	3,416,570
43	36	227,501	3,176,171
44	37	215,140	2,948,670
45	38	203,296	2,733,530
46	39	191,949	2,530,234
47	40	181,079	2,338,285
48	41	170,669	2,157,206
49	42	160,702	1,986,537
50	43	151,161	1,825,835
51	44	142,031	1,674,674
52	45	133,223	1,532,643
53	46	124,792	1,399,420
54	47	116,729	1,274,628
55	48	109,022	1,157,899
56	49	101,661	1,048,877
57	50	94,632·8	947,215·9
58	51	87,923·2	852,583·1
59	52	81,519·7	764,659·9
60	53	75,410·2	683,140·2
61	54	69,583·2	607,730·0

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Male 7 Years older.**	
62	55	63,931·0	538,146·8
63	56	58,513·9	474,215·8
64	57	53,333·6	415,701·9
65	58	48,391·5	362,368·3
66	59	43,689·2	313,976·8
67	60	39,229·0	270,287·6
68	61	35,013·6	231,058·6
69	62	31,046·2	196,045·0
70	63	27,330·7	164,998·8
71	64	23,870·9	137,668·1
72	65	20,670·1	113,797·2
73	66	17,731·2	93,127·1
74	67	15,055·5	75,395·9
75	68	12,642·5	60,340·4
76	69	10,489·4	47,697·9
77	70	8,590·61	37,208·47
78	71	6,937·63	28,617·86
79	72	5,518·82	21,680·23
80	73	4,319·59	16,161·41
81	74	3,322·70	11,841·82
82	75	2,508·79	8,519·12
83	76	1,857·00	6,010·33
84	77	1,345·74	4,153·33
85	78	953·499	2,807·590
86	79	659·590	1,854·091
87	80	444·823	1,194·501
88	81	292·014	749·678
89	82	186·314	457·664
90	83	115·349	271·350
91	84	69·1807	156·0005
92	85	40·1255	86·8198
93	86	22·4676	46·6943
94	87	12·1230	24·2267
95	88	6·2918	12·1037
96	89	3·1349	5·8119
97	90	1·4966	2·6770
98	91	·6832	1·1804
99	92	·2976	·4972
100	93	·1235	·1996
101	94	·0487	·0761
102	95	·0182	·0274
103	96	·0064	·0092
104	97	·0021	·0028
105	98	·0007	·0007

Male 100 Years older.

x	y	$D_{x,y}$	$N_{x,y}$
100	0	88·3178	171·3823
101	1	42·5964	83·0645
102	2	21·5949	40·4681
103	3	10·9018	18·8732
104	4	5·3849	7·9714
105	5	2·5865	2·5865

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 8 Years older than Female.

Male 99 Years older than Female.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	Male 8 Years older.	
8	0	1,553,302	25,823,184
9	1	1,294,942	24,269,882
10	2	1,171,757	22,974,940
11	3	1,091,214	21,803,183
12	4	1,028,585	20,711,969
13	5	976,291	19,683,384
14	6	930,865	18,707,093
15	7	889,876	17,776,228
16	8	851,686	16,886,352
17	9	815,905	16,034,666
18	10	782,018	15,218,761
19	11	749,624	14,436,743
20	12	718,420	13,687,119
21	13	688,185	12,968,699
22	14	659,122	12,280,514
23	15	631,074	11,621,392
24	16	603,921	10,990,318
25	17	577,575	10,386,397
26	18	551,976	9,808,822
27	19	527,084	9,256,846
28	20	502,880	8,729,762
29	21	479,362	8,226,882
30	22	456,755	7,747,520
31	23	435,032	7,290,765
32	24	414,168	6,855,733
33	25	394,136	6,441,565
34	26	374,909	6,047,429
35	27	356,458	5,672,520
36	28	338,756	5,316,062
37	29	321,776	4,977,306
38	30	305,491	4,655,530
39	31	289,874	4,350,039
40	32	274,901	4,060,165
41	33	260,545	3,785,264
42	34	246,784	3,524,719
43	35	233,593	3,277,935
44	36	220,950	3,044,342
45	37	208,834	2,823,392
46	38	197,225	2,614,558
47	39	186,103	2,417,333
48	40	175,450	2,231,230
49	41	165,249	2,055,780
50	42	155,483	1,890,531
51	43	146,136	1,735,048
52	44	137,118	1,588,912
53	45	128,483	1,451,794
54	46	120,224	1,323,311
55	47	112,329	1,203,087
56	48	104,786	1,090,758
57	49	97,581·7	985,971·9
58	50	90,702·7	888,390·2
59	51	84,135·6	797,687·5
60	52	77,867·8	713,551·9
61	53	71,887·7	635,684·1
62	54	66,184·9	563,796·4
63	55	60,657·7	497,611·5
64	56	55,364·7	436,953·8
65	57	50,308·8	381,589·1
66	58	45,492·5	331,280·3
67	59	40,918·6	285,787·8
68	60	36,590·6	244,869·2
69	61	32,511·8	208,278·6
70	62	28,686·3	175,766·8
71	63	25,118·0	147,080·5
72	64	21,810·5	121,962·5
73	65	18,766·9	100,152·0
74	66	15,988·8	81,385·1
75	67	13,476·2	65,396·3
76	68	11,226·8	51,920·1
77	69	9,235·66	40,693·29
78	70	7,495·02	31,457·63
79	71	5,993·98	23,962·61
80	72	4,718·67	17,968·63
81	73	3,652·50	13,249·96
82	74	2,776·56	9,597·46
83	75	2,070·29	6,820·90
84	76	1,512·18	4,750·61
85	77	1,080·53	3,238·43
86	78	754·287	2,157·903
87	79	513·656	1,403·616
88	80	340·721	889·960
89	81	219·811	549·239
90	82	137·701	329·428
91	83	83·6280	191·7266
92	84	49·1543	108·0986
93	85	27·9136	58·9443
94	86	15·2876	31·0307
95	87	8·0601	15·7431
96	88	4·0832	7 6830
97	89	1·9837	3·5998
98	90	·9224	1·6161
99	91	·4097	·6937
100	92	·1734	·2840
101	93	·0698	·1106
102	94	·0267	·0408
103	95	·0097	·0141
104	96	·0033	·0044
105	97	·0011	·0011
		Male 99 Years older.	
99	0	151·549	304·955
100	1	75·2992	153·4061
101	2	39·3727	78·1069
102	3	20·5253	38·7342
103	4	10·4821	18·2089
104	5	5·2121	7·7268
105	6	2·5147	2·5147

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 9 Years older than Female.

Male 98 Years older than Female.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Male 9 Years older.**	
9	0	1,518,828	25,181,603
10	1	1,267,696	23,662,775
11	2	1,148,082	22,395,079
12	3	1,069,763	21,246,997
13	4	1,008,662	20,177,234
14	5	957,437	19,168,572
15	6	912,757	18,211,135
16	7	872,286	17,298,378
17	8	834,466	16,426,092
18	9	798,949	15,591,626
19	10	765,263	14,792,677
20	11	733,044	14,027,414
21	12	702,017	13,294,370
22	13	672,347	12,592,353
23	14	643,838	11,920,006
24	15	616,332	11,276,168
25	16	589,712	10,659,836
26	17	563,889	10,070,124
27	18	538,803	9,506,235
28	19	514,413	8,967,432
29	20	490,702	8,453,019
30	21	467,665	7,962,317
31	22	445,520	7,494,652
32	23	424,242	7,049,132
33	24	403,805	6,624,890
34	25	384,183	6,221,085
35	26	365,347	5,836,902
36	27	347,271	5,471,555
37	28	329,928	5,124,284
38	29	313,291	4,794,356
39	30	297,333	4,481,065
40	31	282,030	4,183,732
41	32	267,355	3,901,702
42	33	253,285	3,634,347
43	34	239,796	3,381,062
44	35	226,866	3,141,266
45	36	214,474	2,914,400
46	37	202,598	2,699,926
47	38	191,219	2,497,328
48	39	180,318	2,306,109
49	40	169,878	2,125,791
50	41	159,882	1,955,913
51	42	150,315	1,796,031
52	43	141,081	1,645,716
53	44	132,239	1,504,635
54	45	123,780	1,372,396
55	46	115,692	1,248,616
56	47	107,964	1,132,924
57	48	100,581	1,024,960
58	49	93,529·1	924,379·3
59	50	86,795·4	830,850·2
60	51	80,366·5	744,054·8
61	52	74,230·5	663,688·3
62	53	68,376·8	589,457·8
63	54	62,796·2	521,081·0
64	55	57,393·1	458,284·8
65	56	52,224·7	400,891·7
66	57	47,294·9	348,667·0
67	58	42,607 5	301,372·1
68	59	38,166·6	258,764·6
69	60	33,976·1	220,598·0
70	61	30,040·5	186,621·9
71	62	26,363·8	156,581·4
72	63	22,950·0	130,217·6
73	64	19,802·4	107,267·6
74	65	16,922·8	87,465·2
75	66	14,311·6	70,542·4
76	67	11,967·1	56,230·8
77	68	9,884·92	44,263·73
78	69	8,057·80	34,378·81
79	70	6,475·55	26,321·01
80	71	5,124·94	19,845·46
81	72	3,989·95	14,720·52
82	73	3,052·14	10,730·57
83	74	2,291·25	7,678·43
84	75	1,685·86	5,387·18
85	76	1,214·17	3,701·32
86	77	854·782	2,487·153
87	78	587·401	1,632·371
88	79	393·445	1,044·970
89	80	256·475	651·525
90	81	162·459	395·050
91	82	99·8337	232·5914
92	83	59·4195	132·7577
93	84	34·1945	73·3382
94	85	18·9932	39·1437
95	86	10·1641	20·1505
96	87	5·2308	9·9864
97	88	2·5838	4·7556
98	89	1·2227	2·1718
99	90	·5531	·9491
100	91	·2388	·3960
101	92	·0981	·1572
102	93	·0383	·0591
103	94	·0142	·0208
104	95	·0050	·0066
105	96	·0016	·0016

Male 98 Years older.

x	y	$D_{x,y}$	$N_{x,y}$
98	0	252·725	526·358
99	1	129·210	273·633
100	2	69·6005	144·4229
101	3	37·4224	74·8224
102	4	19·7352	37·4000
103	5	10·1457	17·6648
104	6	5·0674	7·5191
105	7	2·4517	2·4517

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 10 Years older than Female.

Male 97 Years older than Female.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Male 10 Years older.**	
10	0	1,486,871	24,552,068
11	1	1,242,083	23,065,197
12	2	1,125,514	21,823,114
13	3	1,049,043	20,697,600
14	4	989,183	19,648,557
15	5	938,812	18,659,374
16	6	894,715	17,720,562
17	7	854,650	16,825,847
18	8	817,124	15,971,197
19	9	781,832	15,154,073
20	10	748,337	14,372,241
21	11	716,306	13,623,904
22	12	685,860	12,907,598
23	13	656,756	12,221,738
24	14	628,798	11,564,982
25	15	601,832	10,936,184
26	16	575,738	10,334,352
27	17	550,432	9,758,614
28	18	525,850	9,208,182
29	19	501,956	8,682,332
30	20	478,728	8,180,376
31	21	456,161	7,701,648
32	22	434,470	7,245,487
33	23	413,627	6,811,017
34	24	393,608	6,397,390
35	25	374,385	6,003,782
36	26	355,932	5,629,397
37	27	338,222	5,273,465
38	28	321,229	4,935,243
39	29	304,925	4,614,014
40	30	289,287	4,309,089
41	31	274,288	4,019,802
42	32	259,905	3,745,514
43	33	246,114	3,485,609
44	34	232,892	3,239,495
45	35	220,217	3,006,603
46	36	208,069	2,786,386
47	37	196,428	2,578,317
48	38	185,275	2,381,889
49	39	174,591	2,196,614
50	40	164,361	2,022,023
51	41	154,568	1,857,662
52	42	145,115	1,703,094
53	43	136,061	1,557,979
54	44	127,398	1,421,918
55	45	119,114	1,294,520
56	46	111,197	1,175,406
57	47	103,631	1,064,209
58	48	96,403·6	960,577·9
59	49	89,500·1	864,174·3
60	50	82,907·1	774,674·2
61	51	76,612·5	691,767·1
62	52	70,605·3	615,154·6
63	53	64,875·9	544,549·3
64	54	59,416·5	479,673·4
65	55	54,138·0	420,256·9
66	56	49,096·0	366,118·9
67	57	44,295·6	317,022·9
68	58	39,741·9	272,727·3
69	59	35,439·5	232,985·4
70	60	31,393·5	197,545·9
71	61	27,608·3	166,152·4
72	62	24,088·3	138,544·1
73	63	20,836·9	114,455·8
74	64	17,856·5	93,618·9
75	65	15,147·6	75,762·4
76	66	12,709·0	60,614·8
77	67	10,536·8	47,905·8
78	68	8,624·26	37,368·96
79	69	6,961·78	28,744·70
80	70	5,536·69	21,782·92
81	71	4,333·48	16,246·23
82	72	3,334·13	11,912·75
83	73	2,518·67	8,578·62
84	74	1,865·79	6,059·95
85	75	1,353·63	4,194·16
86	76	960·497	2,840·529
87	77	665·661	1,880·032
88	78	449·932	1,214·371
89	79	296·163	764·439
90	80	189·556	468·276
91	81	117·783	278·720
92	82	70·9339	160·9374
93	83	41·3355	90·0035
94	84	23·2669	48·6680
95	85	12·6278	25·4011
96	86	6·5962	12·7733
97	87	3·3100	6·1771
98	88	1·5925	2·8671
99	89	·7332	1·2746
100	90	·3224	·5414
101	91	·1351	·2190
102	92	·0538	·0839
103	93	·0203	·0301
104	94	·0073	·0098
105	95	·0025	·0025
		Male 97 Years older.	
97	0	410·038	883·375
98	1	215·471	473·337
99	2	119·431	257·866
100	3	66·1530	138·4351
101	4	35·9819	72·2821
102	5	19·1018	36·3002
103	6	9·8642	17·1984
104	7	4·9404	7·3342
105	8	2·3938	2·3938

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 11 Years older than Female.

Male 96 Years older than Female.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
		Male 11 Years older.	
11	0	1,456,830	23,932,687
12	1	1,217,667	22,475,857
13	2	1,103,714	21,258,190
14	3	1,028,784	20,154,476
15	4	969,940	19,125,692
16	5	920,255	18,155,752
17	6	876,625	17,235,497
18	7	836,889	16,358,872
19	8	799,618	15,521,983
20	9	764,539	14,722,365
21	10	731,250	13,957,826
22	11	699,821	13,226,576
23	12	669,956	12,526,755
24	13	641,415	11,856,799
25	14	614,004	11,215,384
26	15	587,571	10,601,380
27	16	561,998	10,013,809
28	17	537,200	9,451,811
29	18	513,116	8,914,611
30	19	489,707	8,401,495
31	20	466,952	7,911,788
32	21	444,847	7,444,836
33	22	423,599	6,999,989
34	23	403,182	6,576,390
35	24	383,570	6,173,208
36	25	364,737	5,789,638
37	26	346,657	5,424,901
38	27	329,304	5,078,244
39	28	312,651	4,748,940
40	29	296,674	4,436,289
41	30	281,346	4,139,615
42	31	266,645	3,858,269
43	32	252,546	3,591,624
44	33	239,027	3,339,078
45	34	226,065	3,100,051
46	35	213,640	2,873,986
47	36	201,732	2,660,346
48	37	190,322	2,458,614
49	38	179,390	2,268,292
50	39	168,921	2,088,902
51	40	158,898	1,919,981
52	41	149,221	1,761,083
53	42	139,951	1,611,862
54	43	131,080	1,471,911
55	44	122,596	1,340,831
56	45	114,486	1,218,235
57	46	106,734	1,103,749
58	47	99,327·3	997,014·7
59	48	92,250·7	897,687·4
60	49	85,490·6	805,436·7
61	50	79,034·5	719,946·1
62	51	72,870·9	640,911·6
63	52	66,990·2	568,040·7
64	53	61,384·3	501,050·5
65	54	56,046·6	439,666·2
66	55	50,894·7	383,619·6
67	56	45,982·6	332,724·9
68	57	41,316·4	286,742·3
69	58	36,902·2	245,425·9
70	59	32,745·6	208,523·7
71	60	28,851·8	175,778·1
72	61	25,225·4	146,926·3
73	62	21,870·4	121,700·9
74	63	18,789·4	99,830·5
75	64	15,983·4	81,041·1
76	65	13,451·4	65,057·7
77	66	11,190·0	51,606·3
78	67	9,192·99	40,416·28
79	68	7,451·19	31,223·29
80	69	5,952·42	23,772·10
81	70	4,681·64	17,819·68
82	71	3,621·19	13,138·04
83	72	2,751·37	9,516·85
84	73	2,050·98	6,765·48
85	74	1,498·10	4,714·50
86	75	1,070·82	3,216·40
87	76	747·987	2,145·582
88	77	509·877	1,397·595
89	78	338·683	887·718
90	79	218·888	549·035
91	80	137·429	330·147
92	81	83·6872	192·7184
93	82	49·3456	109·0312
94	83	28·1258	59·6856
95	84	15·4692	31·5598
96	85	8·1950	16·0906
97	86	4·1740	7·8956
98	87	2·0401	3·7216
99	88	·9550	1·6815
100	89	·4273	·7265
101	90	·1824	·2992
102	91	·0741	·1168
103	92	·0286	·0427
104	93	·0105	·0141
105	94	·0036	·0036
		Male 96 Years older.	
96	0	647·983	1,444·043
97	1	349·595	796·060
98	2	199·164	446·465
99	3	113·515	247·301
100	4	63·6065	133·7864
101	5	34·8271	70·1799
102	6	18·5717	35·3528
103	7	9·6169	16·7811
104	8	4·8237	7·1642
105	9	2·3405	2·3405

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 12 Years older than Female.

Male 95 Years older than Female.

Male 12 Years older.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
12	0	1,428,193	23,322,048
13	1	1,194,082	21,893,855
14	2	1,082,399	20,699,773
15	3	1,008,771	19,617,374
16	4	950,768	18,608,603
17	5	901,649	17,657,835
18	6	858,407	16,756,186
19	7	818,959	15,897,779
20	8	781,931	15,078,820
21	9	747,082	14,296,889
22	10	714,421	13,549,807
23	11	683,593	12,835,386
24	12	654,307	12,151,793
25	13	626,324	11,497,486
26	14	599,454	10,871,162
27	15	573,548	10,271,708
28	16	548,488	9,698,160
29	17	524,190	9,149,672
30	18	500,594	8,625,482
31	19	477,661	8,124,888
32	20	455,371	7,647,227
33	21	433,717	7,191,856
34	22	412,901	6,758,139
35	23	392,899	6,345,238
36	24	373,685	5,952,339
37	25	355,233	5,578,654
38	26	337,516	5,223,421
39	27	320,510	4,885,905
40	28	304,190	4,565,395
41	29	288,530	4,261,205
42	30	273,506	3,972,675
43	31	259,095	3,699,169
44	32	245,274	3,440,074
45	33	232,021	3,194,800
46	34	219,314	2,962,779
47	35	207,134	2,743,465
48	36	195,461	2,536,331
49	37	184,277	2,340,870
50	38	173,564	2,156,593
51	39	163,306	1,983,029
52	40	153,401	1,819,723
53	41	143,911	1,666,322
54	42	134,828	1,522,411
55	43	126,140	1,387,583
56	44	117,832	1,261,443
57	45	109,891	1,143,611
58	46	102,301	1,033,720
59	47	95,048·5	931,419·3
60	48	88,118·1	836,370·8
61	49	81,497·3	748,252·7
62	50	75,174·6	666,755·4
63	51	69,139·9	591,580·8
64	52	63,384·8	522,440·9
65	53	57,902·8	459,056·1
66	54	52,689·0	401,153·3
67	55	47,667·2	348,464·3
68	56	42,889·9	300,797·1
69	57	38,364·3	257,907·2
70	58	34,097·2	219,542·9
71	59	30,094·5	185,445·7
72	60	26,361·6	155,351·2
73	61	22,902·8	128,989·6
74	62	19,721·3	106,086·8
75	63	16,818·4	86,365·5
76	64	14,193·5	69,547·1
77	65	11,843·6	55,353·6
78	66	9,762·89	43,510·00
79	67	7,942·56	33,747·11
80	68	6,370·88	25,804·55
81	69	5,033·17	19,433·67
82	70	3,912·12	14,400·50
83	71	2,988·25	10,488·38
84	72	2,240·47	7,500·13
85	73	1,646·79	5,259·66
86	74	1,185·10	3,612·87
87	75	833·898	2,427·766
88	76	572·936	1,593·868
89	77	383·806	1,020·932
90	78	250·314	637·126
91	79	158·695	386·812
92	80	97·6459	228·1173
93	81	58·2175	130·4714
94	82	33·5761	72·2539
95	83	18·6997	38·6778
96	84	10·0390	19·9781
97	85	5·1857	9·9391
98	86	2·5726	4·7534
99	87	1·2234	2·1808
100	88	·5565	·9574
101	89	·2417	·4009
102	90	·1000	·1592
103	91	·0393	·0592
104	92	·0147	·0199
105	93	·0052	·0052

Male 95 Years older.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
95	0	998·478	2,302·456
96	1	552·466	1,303·978
97	2	323·138	751·512
98	3	189·299	428·374
99	4	109·146	239·075
100	5	61·5652	129·9290
101	6	33·8606	68·3638
102	7	18·1061	34·5032
103	8	9·3898	16·3971
104	9	4·7164	7·0073
105	10	2·2909	2·2909

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 13 Years older than Female.

Male 94 Years older than Female.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Male 13 Years older.**	
13	0	1,400,530	22,719,165
14	1	1,171,022	21,318,635
15	2	1,061,343	20,147,613
16	3	988,832	19,086,270
17	4	931,545	18,097,438
18	5	882,911	17,165,893
19	6	840,016	16,282,982
20	7	800,844	15,442,966
21	8	764,078	14,642,122
22	9	729,889	13,878,044
23	10	697,855	13,148,155
24	11	667,625	12,450,300
25	12	638,912	11,782,675
26	13	611,483	11,143,763
27	14	585,148	10,532,280
28	15	559,760	9,947,132
29	16	535,205	9,387,372
30	17	511,399	8,852,167
31	18	488,281	8,340,768
32	19	465,814	7,852,487
33	20	443,977	7,386,673
34	21	422,764	6,942,696
35	22	402,371	6,519,932
36	23	382,774	6,117,561
37	24	363,947	5,734,787
38	25	345,865	5,370,840
39	26	328,504	5,024,975
40	27	311,837	4,696,471
41	28	295,840	4,384,634
42	29	280,490	4,088,794
43	30	265,762	3,808,304
44	31	251,635	3,542,542
45	32	238,085	3,290,907
46	33	225,092	3,052,822
47	34	212,635	2,827,730
48	35	200,695	2,615,095
49	36	189,254	2,414,400
50	37	178,293	2,225,146
51	38	167,795	2,046,853
52	39	157,657	1,879,058
53	40	147,943	1,721,401
54	41	138,643	1,573,458
55	42	129,746	1,434,815
56	43	121,238	1,305,069
57	44	113,104	1,183,831
58	45	105,327	1,070,727
59	46	97,894·5	965,400·3
60	47	90,790·5	867,505·8
61	48	84,002·0	776,715·3
62	49	77,517·1	692,713·3
63	50	71,325·6	615,196·2
64	51	65,418·8	543,870·6
65	52	59,789·9	478,451·8
66	53	54,434·0	418,661·9
67	54	49,347·7	364,227·9

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Male 13 Years older.**	
68	55	44,461·3	314,880·2
69	56	39,825·4	270,418·9
70	57	35,448·1	230,593·5
71	58	31,336·6	195,145·4
72	59	27,497·0	163,808·8
73	60	23,934·3	136,311·8
74	61	20,652·2	112,377·5
75	62	17,652·6	91,725·3
76	63	14,935·1	74,072·7
77	64	12,497·1	59,137·6
78	65	10,333·2	46,640·5
79	66	8,434·95	36,307·34
80	67	6,791·01	27,872·39
81	68	5,386·99	21,081·38
82	69	4,205·87	15,694·39
83	70	3,228·34	11,488·52
84	71	2,433·37	8,260·18
85	72	1,798·94	5,826·81
86	73	1,302·73	4,027·87
87	74	922·900	2,725·144
88	75	638·741	1,802·244
89	76	431·273	1,163·503
90	77	283·664	732·230
91	78	181·478	448·566
92	79	112·756	267·088
93	80	67·9280	154·3320
94	81	39·6128	86·4040
95	82	22·3233	46·7912
96	83	12·1355	24·4679
97	84	6·3526	12·3324
98	85	3·1962	5·9798
99	86	1·5427	2·7836
100	87	·7129	1·2409
101	88	·3148	·5280
102	89	·1326	·2132
103	90	·0531	·0806
104	91	·0202	·0275
105	92	·0073	·0073

Male 94 Years older.

x	y	$D_{x, y}$	$N_{x, y}$
94	0	1,501·79	3,585·12
95	1	851·296	2,083·326
96	2	510·655	1,232·030
97	3	307·132	721·375
98	4	182·012	414·243
99	5	105·643	232·231
100	6	59·8566	126·5883
101	7	33·0117	66·7317
102	8	17·6785	33·7200
103	9	9·1809	16·0415
104	10	4·6165	6·8606
105	11	2·2441	2·2441

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 14 Years older than Female.

Male 93 Years older than Female.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 14 Years older.**	
14	0	1,373,483	22,123,366
15	1	1,148,242	20,749,883
16	2	1,040,365	19,601,641
17	3	968,839	18,561,276
18	4	912,186	17,592,437
19	5	863,995	16,680,251
20	6	821,436	15,816,256
21	7	782,559	14,994,820
22	8	746,493	14,212,261
23	9	712,964	13,465,768
24	10	681,553	12,752,804
25	11	651,917	12,071,251
26	12	623,773	11,419,334
27	13	596,889	10,795,561
28	14	571,082	10,198,672
29	15	546,205	9,627,590
30	16	522,145	9,081,385
31	17	498,820	8,559,240
32	18	476,170	8,060,420
33	19	454,159	7,584,250
34	20	432,765	7,130,091
35	21	411,982	6,697,326
36	22	392,002	6,285,344
37	23	372,800	5,893,342
38	24	354,350	5,520,542
39	25	336,630	5,166,192
40	26	319,614	4,829,562
41	27	303,277	4,509,948
42	28	287,596	4,206,671
43	29	272,548	3,919,075
44	30	258,110	3,646,527
45	31	244,259	3,388,417
46	32	230,975	3,144,158
47	33	218,237	2,913,183
48	34	206,025	2,694,946
49	35	194,321	2,488,921
50	36	183,107	2,294,600
51	37	172,366	2,111,493
52	38	161,991	1,939,127
53	39	152,047	1,777,136
54	40	142,527	1,625,089
55	41	133,417	1,482,562
56	42	124,704	1,349,145
57	43	116,373	1,224,441
58	44	108,406	1,108,068
59	45	100,790	999,662
60	46	93,509·0	898,871·5
61	47	86,549·6	805,362·5
62	48	79,899·5	718,812·9
63	49	73,548·2	638,913·4
64	50	67,486·8	565,365·2
65	51	61,708·5	497,878·4
66	52	56,208·0	436,169·9
67	53	50,982·0	379,961·9
68	54	46,028·7	328,979·9
69	55	41,284·4	282,951·2
70	56	36,798·1	241,666·8
71	57	32,578·1	204,868·7
72	58	28,631·9	172,290·6
73	59	24,965·2	143,658·7
74	60	21,582·4	118,693·5
75	61	18,485·9	97,111·1
76	62	15,675·8	78,625·2
77	63	13,150·0	62,949·4
78	64	10,903·3	49,799·4
79	65	8,927·66	38,896·12
80	66	7,212·01	29,968·46
81	67	5,742·24	22,756·45
82	68	4,501·54	17,014·21
83	69	3,470·74	12,512·67
84	70	2,628·87	9,041·93
85	71	1,953·82	6,413·06
86	72	1,423·09	4,459·24
87	73	1,014·50	3,036·15
88	74	706·914	2,021·647
89	75	480·808	1,314·733
90	76	318·746	833·925
91	77	205·657	515·179
92	78	128·944	309·522
93	79	78·4393	180·5775
94	80	46·2201	102·1382
95	81	26·3369	55·9181
96	82	14·4872	29·5812
97	83	7·6793	15·0940
98	84	3·9154	7·4147
99	85	1·9166	3·4993
100	86	·8990	1·5827
101	87	·4033	·6837
102	88	·1727	·2804
103	89	·0704	·1077
104	90	·0273	·0373
105	91	·0100	·0100

Male 93 Years older.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
93	0	2,207·13	5,457·55
94	1	1,280·42	3,250·42
95	2	786·870	1,970·003
96	3	485·361	1,183·133
97	4	295·309	697·772
98	5	176·171	402·463
99	6	102·711	226·292
100	7	58·3561	123·5812
101	8	32·2321	65·2251
102	9	17·2853	32·9930
103	10	8·9863	15·7077
104	11	4·5221	6·7214
105	12	2·1993	2·1993

JOINT LIVES:—Male and Female Life.

Male 15 Years older than Female.

Male 92 Years older than Female.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 15 Years older.**	
15	0	1,346,764	21,534,304
16	1	1,125,545	20,187,540
17	2	1,019,330	19,061,995
18	3	948,705	18,042,665
19	4	892,643	17,093,960
20	5	844,885	16,201,317
21	6	802,681	15,356,432
22	7	764,549	14,553,751
23	8	729,183	13,789,202
24	9	696,309	13,060,019
25	10	665,518	12,363,710
26	11	636,470	11,698,192
27	12	608,886	11,061,722
28	13	582,541	10,452,836
29	14	557,252	9,870,295
30	15	532,876	9,313,043
31	16	509,302	8,780,167
32	17	486,448	8,270,865
33	18	464,256	7,784,417
34	19	442,690	7,320,161
35	20	421,728	6,877,471
36	21	401,365	6,455,743
37	22	381,787	6,054,378
38	23	362,969	5,672,591
39	24	344,888	5,309,622
40	25	327,520	4,964,734
41	26	310,841	4,637,214
42	27	294,826	4,326,373
43	28	279,453	4,031,547
44	29	264,700	3,752,094
45	30	250,545	3,487,394
46	31	236,965	3,236,849
47	32	223,941	2,999,884
48	33	211,453	2,775,943
49	34	199,482	2,564,490
50	35	188,011	2,365,008
51	36	177,021	2,176,997
52	37	166,404	1,999,976
53	38	156,227	1,833,572
54	39	146,481	1,677,345
55	40	137,155	1,530,864
56	41	128,233	1,393,709
57	42	119,700	1,265,476
58	43	111,540	1,145,776
59	44	103,736	1,034,236
60	45	96,274·9	930,499·7
61	46	89,141·2	834,224·8
62	47	82,322·7	745,083·6
63	48	75,808·6	662,760·9
64	49	69,589·8	586,952·3
65	50	63,659·3	517,362·5
66	51	58,011·7	453,703·2
67	52	52,643·5	395,691·5
68	53	47,553·1	343,048·0
69	54	42,739·9	295,494·9

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 15 Years older.**	
70	55	38,146·2	252,755·0
71	56	33,818·8	214,608·8
72	57	29,766·3	180,790·0
73	58	25,995·6	151,023·7
74	59	22,512·0	125,028·1
75	60	19,318·5	102,516·1
76	61	16,415·8	83,197·6
77	62	13,802·2	66,781·8
78	63	11,472·9	52,979·6
79	64	9,420·22	41,506·65
80	65	7,633·28	32,086·43
81	66	6,098·22	24,453·15
82	67	4,798·40	18,354·93
83	68	3,714·73	13,556·53
84	69	2,826·26	9,841·80
85	70	2,110·79	7,015·54
86	71	1,545·61	4,904·75
87	72	1,108·23	3,359·14
88	73	777·078	2,250·905
89	74	532·124	1,473·827
90	75	355·356	941·703
91	76	231·092	586·347
92	77	146·124	355·255
93	78	89·7008	209·1313
94	79	53·3722	119·4305
95	80	30·7298	66·0583
96	81	17·0919	35·3285
97	82	9·1674	18·2366
98	83	4·7331	9·0692
99	84	2·3479	4·3361
100	85	1·1170	1·9882
101	86	·5086	·8712
102	87	·2212	·3626
103	88	·0917	·1414
104	89	·0362	·0497
105	90	·0135	·0135
		Male 92 Years older.	
92	0	3,172·73	8,130·65
93	1	1,881·78	4,957·92
94	2	1,183·52	3,076·14
95	3	747·893	1,892·624
96	4	466·678	1,144·731
97	5	285·832	678·053
98	6	171·282	392·221
99	7	100·136	220·939
100	8	56·9779	120·8027
101	9	31·5152	63·8248
102	10	16·9190	32·0096
103	11	8·8027	15·3906
104	12	4·4319	6·5879
105	13	2·1560	2·1560

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 16 Years older than Female.

Male 91 Years older than Female.

Ages		$D_{x, y}$	$N_{x, y}$	Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Male 16 Years older.**		x	y	**Male 16 Years older.**	
16	0	1,320,144	20,951,854	71	55	35,057·8	224,359·1
17	1	1,102,788	19,631,710	72	56	30,899·9	189,301·3
18	2	998,146	18,528,922	73	57	27,025·6	158,401·4
19	3	928,379	17,530,776	74	58	23,441·1	131,375·8
20	4	872,899	16,602,397	75	59	20,150·5	107,934·7
21	5	825,593	15,729,498	76	60	17,155·2	87,784·2
22	6	784,208	14,903,905	77	61	14,453·7	70,629·0
23	7	746,820	14,119,697	78	62	12,042·0	56,175·3
24	8	712,150	13,372,877	79	63	9,912·38	44,133·31
25	9	679,927	12,660,727	80	64	8,054·43	34,220·93
26	10	649,748	11,980,800	81	65	6,454·44	26,166·50
27	11	621,280	11,331,052	82	66	5,095·87	19,712·06
28	12	594,249	10,709,772	83	67	3,959·70	14,616·19
29	13	568,433	10,115,523	84	68	3,024·95	10,656·49
30	14	543,653	9,547,090	85	69	2,269·29	7,631·54
31	15	519,768	9,003,437	86	70	1,669·79	5,362·25
32	16	496,670	8,483,669	87	71	1,203·65	3,692·46
33	17	474,276	7,986,999	88	72	848·872	2,488·805
34	18	452,532	7,512,723	89	73	584·940	1,639·933
35	19	431,400	7,060,191	90	74	393·283	1,054·993
36	20	410,860	6,628,791	91	75	257·634	661·710
37	21	390,906	6,217,931	92	76	164·196	404·076
38	22	371,720	5,827,025	93	77	101·652	239·880
39	23	353,277	5,455,305	94	78	61·0349	138·2284
40	24	335,555	5,102,028	95	79	35·4850	77·1935
41	25	318,530	4,766,473	96	80	19·9427	41·7085
42	26	302,179	4,447,943	97	81	10·8156	21·7658
43	27	286,478	4,145,764	98	82	5·6503	10·9502
44	28	271,407	3,859,286	99	83	2·8382	5·2999
45	29	256,942	3,587,879	100	84	1·3683	2·4617
46	30	243,062	3,330,937	101	85	·6319	1·0934
47	31	229,748	3,087,875	102	86	·2789	·4615
48	32	216,980	2,858,127	103	87	·1175	·1826
49	33	204,737	2,641,147	104	88	·0471	·0651
50	34	193,004	2,436,410	105	89	·0180	·0180
51	35	181,761	2,243,406			**Male 91 Years older.**	
52	36	170,897	2,061,645				
53	37	160,483	1,890,748				
54	38	150,508	1,730,265				
55	39	140,960	1,579,757				
56	40	131,825	1,438,797	91	0	4,465·36	11,866·35
57	41	123,087	1,306,972	92	1	2,705·05	7,400·99
58	42	114,729	1,183,885	93	2	1,739·37	4,695·94
59	43	106,735	1,069,156	94	3	1,124·89	2,956·57
60	44	99,089·2	962,420·9	95	4	719·105	1,831·681
61	45	91,777·8	863,331·7	96	5	451·701	1,112·576
62	46	84,787·7	771,553·9	97	6	277·899	660·875
63	47	78,107·7	686,766·2	98	7	166·988	382·976
64	48	71,728·6	608,658·5	99	8	97·7713	215·9876
65	49	65,643·0	536,929·9	100	9	55·7105	118·2163
66	50	59,845·6	471,286·9	101	10	30·8473	62·5058
67	51	54,332·8	411,441·3	102	11	16·5732	31·6585
68	52	49,102·9	357,108·5	103	12	8·6271	15·0853
69	53	44,155·4	308,005·6	104	13	4·3446	6·4582
70	54	39,491·1	263,850·2	105	14	2·1136	2·1136

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 17 Years older than Female.

Male 90 Years older than Female.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Male 17 Years older.**	
17	0	1,293,452	20,376,116
18	1	1,079,871	19,082,664
19	2	976,761	18,002,793
20	3	907,844	17,026,032
21	4	852,968	16,118,188
22	5	806,593	15,265,220
23	6	766,023	14,458,627
24	7	729,375	13,692,604
25	8	695,394	12,963,229
26	9	663,815	12,267,835
27	10	634,241	11,604,020
28	11	606,345	10,969,779
29	12	579,858	10,363,434
30	13	554,562	9,783,576
31	14	530,281	9,229,014
32	15	506,877	8,698,733
33	16	484,242	8,191,856
34	17	462,299	7,707,614
35	18	440,991	7.245,315
36	19	420,282	6,804,324
37	20	400,153	6,384,042
38	21	380,599	5,983,889
39	22	361,794	5,603,290
40	23	343,717	5,241,496
41	24	326,344	4,897,779
42	25	309,654	4,571,435
43	26	293,623	4,261,781
44	27	278,229	3,968,158
45	28	263,452	3,689,929
46	29	249,269	3,426,477
47	30	235,660	3,177,208
48	31	222,606	2,941,548
49	32	210,088	2,718,942
50	33	198,088	2,508,854
51	34	186,588	2,310,766
52	35	175,474	2,124,178
53	36	164,816	1,948,704
54	37	154,608	1,783,888
55	38	144,835	1,629,280
56	39	135,483	1,484,445
57	40	126,535	1,348,962
58	41	117,975	1,222,427
59	42	109,786	1,104,452
60	43	101,953	994,666
61	44	94,460·7	892,713·2
62	45	87,295·5	798,252·5
63	46	80,446·5	710,957·0
64	47	73,904·0	630,510·5
65	48	67,660·4	556,606·5
66	49	61,710·5	488,946·1
67	50	56,050·4	427,235·6
68	51	50,678·5	371,185·2
69	52	45,594·4	320,506·7
70	53	40,799·0	274,912·3
71	54	36,293·8	234,113·3
72	55	32,032·0	197,819·5
73	56	28,054·8	165,787·5
74	57	24,369·9	137,732·7
75	58	20,982·2	113,362·8
76	59	17,894·1	92,380·6
77	60	15,104·7	74,486·5
78	61	12,610·4	59,381·8
79	62	10,404·0	46,771·4
80	63	8,475·23	36,367·38
81	64	6,810·55	27,892·15
82	65	5,393·53	21,081·60
83	66	4,205·18	15,688·07
84	67	3,224·43	11,482·89
85	68	2,428·82	8,258·46
86	69	1,795·17	5,829·64
87	70	1,300·35	4,034·47
88	71	921·958	2,734·123
89	72	638·982	1,812·165
90	73	432·318	1,173·183
91	74	285·131	740·865
92	75	183·054	455·734
93	76	114·224	272·680
94	77	69·1667	158·4555
95	78	40·5796	89·2888
96	79	23·0287	48·7092
97	80	12·6196	25·6805
98	81	6·6661	13·0609
99	82	3·3882	6·3948
100	83	1·6540	3·0066
101	84	·7740	1·3526
102	85	·3466	·5786
103	86	·1482	·2320
104	87	·0604	·0838
105	88	·0234	·0234
		Male 90 Years older.	
90	0	6,159·09	16,981·89
91	1	3,807·13	10,822·80
92	2	2,500·33	7,015·67
93	3	1,653·21	4,515·34
94	4	1,081·59	2,862·13
95	5	696·026	1,780·541
96	6	439·164	1,084·515
97	7	270·933	645·351
98	8	163·044	374·418
99	9	95·5965	211·3738
100	10	54·5299	115·7773
101	11	30·2169	61·2474
102	12	16·2426	31·0305
103	13	8·4571	14·7879
104	14	4·2591	6·3308
105	15	2·0717	2·0717

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 18 Years older than Female.

Male 89 Years Older than Female.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 18 Years older.**	
18	0	1,266,572	19,807,349
19	1	1,056,735	18,540,777
20	2	955,157	17,484,042
21	3	887,115	16,528,885
22	4	833,338	15,641,770
23	5	787,889	14,808,432
24	6	748,129	14,020,543
25	7	712,214	13,272,414
26	8	678,916	12,560,200
27	9	647,973	11,881,284
28	10	618,995	11,233,311
29	11	591,661	10,614,316
30	12	565,708	10,022,655
31	13	540,921	9,456,947
32	14	517,129	8,916,026
33	15	494,194	8,398,897
34	16	472,014	7,904,703
35	17	450,509	7,432,689
36	18	429,626	6,982,180
37	19	409,330	6,552,554
38	20	389,602	6,143,224
39	21	370,436	5,753,622
40	22	352,003	5,383,186
41	23	334,282	5,031,183
42	24	317,250	4,696,901
43	25	300,886	4,379,651
44	26	285,168	4,078,765
45	27	270,074	3,793,597
46	28	255,584	3,523,523
47	29	241,677	3,267,939
48	30	228,335	3,026,262
49	31	215,537	2,797,927
50	32	203,266	2,582,390
51	33	191,504	2,379,124
52	34	180,134	2,187,620
53	35	169,230	2,007,486
54	36	158,783	1,838,256
55	37	148,780	1,679,473
56	38	139,207	1,530,693
57	39	130,046	1,391,486
58	40	121,280	1,261,440
59	41	112,893	1,140,160
60	42	104,868	1,027,267
61	43	97,190·9	922,399·2
62	44	89,847·4	825,208·3
63	45	82,826·0	735,360·9
64	46	76,116·9	652,534·9
65	47	69,712·4	576,418·0
66	48	63,607·1	506,705·6
67	49	57,797·1	443,098·5
68	50	52,280·6	385,301·4
69	51	47,057·5	333,020·8
70	52	42,128·6	285,963·3
71	53	37,495·8	243,834·7
72	54	33,161·2	206,338·9
73	55	29,082·6	173,177·7
74	56	25,298·0	144,095·1
75	57	21,813·5	118,797·1
76	58	18,632·6	96,983·6
77	59	15,755·3	78,351·0
78	60	13,178·4	62,595·7
79	61	10,895·1	49,417·3
80	62	8,895·59	38,522·21
81	63	7,166·36	29,626·62
82	64	5,691·11	22,460·26
83	65	4,450·81	16,769·15
84	66	3,424·32	12,318·34
85	67	2,588·99	8,894·02
86	68	1,921·37	6,305·03
87	69	1,397·99	4,383·66
88	70	996·030	2,985·669
89	71	693·997	1,989·639
90	72	472·260	1,295·642
91	73	313·432	823·382
92	74	202·592	509·950
93	75	127·343	307·358
94	76	77·7209	180·0146
95	77	45·9860	102·2937
96	78	26·3349	56·3077
97	79	14·5724	29·9728
98	80	7·7780	15·4004
99	81	3·9974	7·6224
100	82	1·9746	3·6250
101	83	·9357	1·6504
102	84	·4245	·7147
103	85	·1841	·2902
104	86	·0761	·1061
105	87	·0300	·0300

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 89 Years older.**	
89	0	8,333·44	23,852·42
90	1	5,251·20	15,518·98
91	2	3,519·01	10,267·78
92	3	2,376·48	6,748·77
93	4	1,589·58	4,372·29
94	5	1,046·88	2,782·71
95	6	676·709	1,735·834
96	7	428·155	1,059·125
97	8	264·534	630·970
98	9	159·418	366·436
99	10	93·5707	207·0184
100	11	53·4156	113·4477
101	12	29·6141	60·0321
102	13	15·9226	30·4180
103	14	8·2907	14·4954
104	15	4·1747	6·2047
105	16	2·0300	2·0300

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 19 Years older than Female.

Male 88 Years older than Female.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Male 19 Years older.**	
19	0	1,239,436	19,245,924
20	1	1,033,361	18,006,488
21	2	933,348	16,973,127
22	3	866,700	16,039,779
23	4	814,014	15,173,079
24	5	769,485	14,359,065
25	6	730,527	13,589,580
26	7	695,338	12,859,053
27	8	662,714	12,163,715
28	9	632,396	11,501,001
29	10	604,004	10,868,605
30	11	577,223	10,264,601
31	12	551,793	9,687,378
32	13	527,505	9,135,585
33	14	504,190	8,608,080
34	15	481,714	8,103,890
35	16	459,976	7,622,176
36	17	438,899	7,162,200
37	18	418,431	6,723,301
38	19	398,537	6,304,870
39	20	379,199	5,906,333
40	21	360,411	5,527,134
41	22	342,341	5,166,723
42	23	324,967	4,824,382
43	24	308,268	4,499,415
44	25	292,222	4,191,147
45	26	276,810	3,898,925
46	27	262,009	3,622,115
47	28	247,801	3,360,106
48	29	234,165	3,112,305
49	30	221,083	2,878,140
50	31	208,537	2,657,057
51	32	196,509	2,448,520
52	33	184,879	2,252,011
53	34	173,724	2,067,132
54	35	163,035	1,893,408
55	36	152,798	1,730,373
56	37	142,999	1,577,575
57	38	133,620	1,434,576
58	39	124,645	1,300,956
59	40	116,055	1,176,311
60	41	107,836	1,060,256
61	42	99,969·8	952,419·6
62	43	92,444·3	852,449·8
63	44	85,247·1	760,005·5
64	45	78,368·3	674,758·4
65	46	71,799·9	596,390·1
66	47	65,536·1	524,590·2
67	48	59,573·4	459,054·1
68	49	53,909·8	399,480·7
69	50	48,545·1	345,570·9
70	51	43,480·5	297,025·8
71	52	38,717·8	253,545·3
72	53	34,259·5	214,827·5
73	54	30,107·9	180,568·0

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Male 19 Years older.**	
74	55	26,224·8	150,460·1
75	56	22,644·3	124,235·3
76	57	19,370·9	101,591·0
77	58	16,405·6	82,220·1
78	59	13,746·0	65,814·5
79	60	11,385·9	52,068·5
80	61	9,315·51	40,682·63
81	62	7,521·80	31,367·12
82	63	5,988·44	23,845·32
83	64	4,696·38	17,856·88
84	65	3,624·35	13,160·50
85	66	2,749·49	9,536·15
86	67	2,048·08	6,786·66
87	68	1,496·27	4,738·58
88	69	1,070·82	3,242·31
89	70	749·754	2,171·492
90	71	512·921	1,421·738
91	72	342·390	908·817
92	73	222·700	566·427
93	74	140·934	343·727
94	75	86·6476	202·7926
95	76	51·6734	116·1450
96	77	29·8436	64·4716
97	78	16·6645	34·6280
98	79	8·9816	17·9635
99	80	4·6642	8·9819
100	81	2·3296	4·3177
101	82	1·1170	1·9881
102	83	·5132	·8711
103	84	·2255	·3579
104	85	·0946	·1324
105	86	·0378	·0378

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Male 88 Years older.**	
88	0	11,070·8	32,911·0
89	1	7,105·03	21,840·24
90	2	4,853·79	14,735·21
91	3	3,344·70	9,881·42
92	4	2,285·00	6,536·72
93	5	1,538.56	4,251·72
94	6	1,017·83	2,713·16
95	7	659·745	1,695·332
96	8	418·044	1,035·587
97	9	258·650	617·543
98	10	156·039	358·893
99	11	91·6585	202·8538
100	12	52·3500	111·1953
101	13	29·0307	58·8453
102	14	15·6094	29·8146
103	15	8·1264	14·2052
104	16	4·0906	6·0788
105	17	1·9882	1·9882

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 20 Years older than Female.

Male 87 Years older than Female.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Male 20 Years older.**	
20	0	1,212,022	18,692,296
21	1	1,009,766	17,480,274
22	2	911,868	16,470,508
23	3	846,602	15,558,640
24	4	794,999	14,712,038
25	5	751,381	13,917,039
26	6	713,217	13,165,658
27	7	678,743	12,452,441
28	8	646,783	11,773,698
29	9	617,081	11,126,915
30	10	589,265	10,509,834
31	11	563,025	9,920,569
32	12	538,107	9,357,544
33	13	514,306	8,819,437
34	14	491,457	8,305,131
35	15	469,429	7,813,674
36	16	448,122	7,344,245
37	17	427,462	6,896,123
38	18	407,398	6,468,661
39	19	387,895	6,061,263
40	20	368,937	5,673,368
41	21	350,518	5,304,431
42	22	332,801	4,953,913
43	23	315,766	4,621,112
44	24	299,391	4,305,346
45	25	283,657	4,005,955
46	26	268,543	3,722,298
47	27	254,030	3,453,755
48	28	240,097	3,199,725
49	29	226,728	2,959,628
50	30	213,903	2,732,900
51	31	201,605	2,518,997
52	32	189,711	2,317,392
53	33	178,301	2,127,681
54	34	167,365	1,949,380
55	35	156,890	1,782,015
56	36	146,861	1,625,125
57	37	137,260	1,478,264
58	38	128,071	1,341,004
59	39	119,275	1,212,933
60	40	110,856	1,093,658
61	41	102,798	982,802
62	42	95,087·5	880,004·4
63	43	87,711·1	784,916·9
64	44	80,659·2	697,205·8
65	45	73,923·5	616,546·6
66	46	67,498·5	542,623·1
67	47	61,380·1	475,124·6
68	48	55,566·6	413,744·5
69	49	50,057·9	358,177·9
70	50	44,855·0	308,120·0
71	51	39,960·2	263,265·0
72	52	35,376·0	223,304·8
73	53	31,105·1	187,928·8
74	54	27,149·4	156,823·7
75	55	23,473·9	129,674·3
76	56	20,108·6	106,200·4
77	57	17,055·6	86,091·8
78	58	14,313·3	69,036·2
79	59	11,876·3	54,722·9
80	60	9,735·08	42,846·56
81	61	7,876·88	33,111·48
82	62	6,285·46	25,234·60
83	63	4,941·74	18,949·14
84	64	3,824·31	14,007·40
85	65	2,910·09	10,183·09
86	66	2,175·05	7,273·00
87	67	1,594·94	5,097·95
88	68	1,146·10	3,503·01
89	69	806·051	2,356·912
90	70	554·130	1,550·861
91	71	371·869	996·731
92	72	243·275	624·862
93	73	154·923	381·587
94	74	95·8955	226·6639
95	75	57·6084	130·7684
96	76	33·5345	73·1600
97	77	18·8847	39·6255
98	78	10·2711	20·7408
99	79	5·3859	10·4697
100	80	2·7181	5·0838
101	81	1·3178	2·3657
102	82	·6126	1·0479
103	83	·2726	·4353
104	84	·1158	·1627
105	85	·0469	·0469

Male 87 Years older.

x	y	$D_{x, y}$	$N_{x, y}$
87	0	14,453·3	44,646·4
88	1	9,438·86	30,193·10
89	2	6,567·33	20,754·24
90	3	4,613·37	14,186·91
91	4	3,215·95	9,573·54
92	5	2,211·67	6,357·59
93	6	1,495·86	4,145·92
94	7	992·310	2,650·062
95	8	644·164	1,657·752
96	9	408·745	1,013·588
97	10	253·169	604·843
98	11	152·851	351·674
99	12	89·8300	198·8234
100	13	51·3185	108·9934
101	14	28·4596	57·6749
102	15	15·2999	29·2153
103	16	7·9628	13·9154
104	17	4·0064	5·9526
105	18	1·9462	1·9462

JOINT LIVES:—Male and Female Life.

Male 21 Years older than Female.

Male 86 Years older than Female.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
		Male 21 Years older.	
21	0	1,184,348	18,147,004
22	1	986,528	16,962,656
23	2	890,723	15,976,128
24	3	826,826	15,085,405
25	4	776,294	14,258,579
26	5	733,576	13,482,285
27	6	696,195	12,748,709
28	7	662,427	12,052,514
29	8	631,119	11,390,087
30	9	602,023	10,758,968
31	10	574,771	10,156,945
32	11	549,060	9,582,174
33	12	524,643	9,033,114
34	13	501,318	8,508,471
35	14	478,923	8,007,153
36	15	457,331	7,528,230
37	16	436,445	7,070,899
38	17	416,191	6,634,454
39	18	396,519	6,218,263
40	19	377,398	5,821,744
41	20	358,810	5,444,346
42	21	340,750	5,085,536
43	22	323,378	4,744,786
44	23	306,673	4,421,408
45	24	290,616	4,114,735
46	25	275,186	3,824,119
47	26	260,365	3,548,933
48	27	246,133	3,288,568
49	28	232,472	3,042,435
50	29	219,365	2,809,963
51	30	206,793	2,590,598
52	31	194,631	2,383,805
53	32	182,961	2,189,174
54	33	171,774	2,006,213
55	34	161,056	1,834,439
56	35	150,793	1,673,383
57	36	140,967	1,522,590
58	37	131,560	1,381,623
59	38	122,554	1,250,063
60	39	113,932	1,127,509
61	40	105,678	1,013,577
62	41	97,778·0	907,898·9
63	42	90,218·9	810,120·9
64	43	82,990·5	719,902·0
65	44	76,084·5	636,911·5
66	45	69,494·9	560,827·0
67	46	63,218·0	491,332·1
68	47	57,251·8	428,114·1
69	48	51,596·3	370,862·3
70	49	46,252·8	319,266·0
71	50	41,223·5	273,013·2
72	51	36,511·2	231,789·7
73	52	32,118·8	195,278·5
74	53	28,048·5	163,159·7
75	54	24,301·4	135,111·2
76	55	20,845·3	110,809·8
77	56	17,705·1	89,964·5
78	57	14,880·4	72,259·4
79	58	12,366·4	57,379·0
80	59	10,154·4	45,012·6
81	60	8,231·65	34,858·17
82	61	6,582·17	26,626·52
83	62	5,186·84	20,044·35
84	63	4,024·11	14,857·51
85	64	3,070·65	10,833·40
86	65	2,302·10	7,762·75
87	66	1,693·82	5,460·65
88	67	1,221·68	3,766·83
89	68	862·716	2,545·154
90	69	595·738	1,682·438
91	70	401·745	1,086·700
92	71	264·221	684·955
93	72	169·236	420·734
94	73	105·414	251·498
95	74	63·7569	146·0840
96	75	37·3861	82·3271
97	76	21·2203	44·9410
98	77	11·6395	23·7207
99	78	6·1592	12·0812
100	79	3·1387	5·9220
101	80	1·5376	2·7833
102	81	·7228	1·2457
103	82	·3254	·5229
104	83	·1400	·1975
105	84	·0575	·0575

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
		Male 86 Years older.	
86	0	18,559·6	59,597·6
87	1	12,322·8	41,038·0
88	2	8,724·53	28,715·19
89	3	6,242·02	19,990·66
90	4	4,435·78	13,748·64
91	5	3,112·74	9,312·86
92	6	2,150·29	6,200·12
93	7	1,458·36	4,049·83
94	8	968·875	2,591·471
95	9	629·836	1,622·596
96	10	400·083	992·760
97	11	247·995	592·677
98	12	149·801	344·682
99	13	88·0601	194·8810
100	14	50·3091	106·8209
101	15	27·8954	56·5118
102	16	14·9918	28·6164
103	17	7·7989	13·6246
104	18	3·9218	5·8257
105	19	1·9039	1·9039

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 22 Years older than Female.

Male 85 Years older than Female.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Male 22 Years older.**	
22	0	1,157,091	17,610,653
23	1	963,652	16,453,562
24	2	869,916	15,489,910
25	3	807,373	14,619,994
26	4	757,899	13,812,621
27	5	716,069	13,054,722
28	6	679,460	12,338,653
29	7	646,385	11,659,193
30	8	615,718	11,012,808
31	9	587,215	10,397,090
32	10	560,515	9,809,875
33	11	535,322	9,249,360
34	12	511,394	8,714,038
35	13	488,533	8,202,644
36	14	466,581	7,714,111
37	15	445,414	7,247,530
38	16	424,936	6,802,116
39	17	405,077	6,377,180
40	18	385,788	5,972,103
41	19	367,039	5,586,315
42	20	348,811	5,219,276
43	21	331,102	4,870,465
44	22	314,067	4,539,363
45	23	297,685	4,225,296
46	24	281,937	3,927,611
47	25	266,806	3,645,674
48	26	252,271	3,378,868
49	27	238,316	3,126,597
50	28	224,922	2,888,281
51	29	212,073	2,663,359
52	30	199,639	2,451,286
53	31	187,706	2,251,647
54	32	176,263	2,063,941
55	33	165,299	1,887,678
56	34	154,798	1,722,379
57	35	144,742	1,567,581
58	36	135,113	1,422,839
59	37	125,892	1,287,726
60	38	117,064	1,161,834
61	39	108,610	1,044,770
62	40	100,517	936,160
63	41	92,771·7	835,643·3
64	42	85,363·3	742,871·6
65	43	78,283·6	657,508·3
66	44	71,526·4	579,224·7
67	45	65,087·9	507,698·3
68	46	58,966·1	442,610·4
69	47	53,161·1	383,644·3
70	48	47,674·3	330,483·2
71	49	42,508·0	282,808·9
72	50	37,665·4	240,300·9
73	51	33,149·5	202,635·5
74	52	28,962·6	169,486·0
75	53	25,106·3	140,523·4
76	54	21,580·2	115,417·1
77	55	18,353·8	93,836·9
78	56	15,447·1	75,483·1
79	57	12,856·4	60,036·0
80	58	10,573·5	47,179·6
81	59	8,586·19	36,606·11
82	60	6,878·62	28,019·92
83	61	5,431·69	21,141·30
84	62	4,223·70	15,709·61
85	63	3,231·08	11,485·91
86	64	2,429·11	8,254·83
87	65	1,792·76	5,825·72
88	66	1,297·41	4,032·96
89	67	919·608	2,735·553
90	68	637·618	1,815·945
91	69	431·911	1,178·327
92	70	285·449	746·416
93	71	183·807	460·967
94	72	115·153	277·160
95	73	70·0850	162·0067
96	74	41·3764	91·9217
97	75	23·6576	50·5453
98	76	13·0790	26·8877
99	77	6·9798	13·8087
100	78	3·5893	6·8289
101	79	1·7756	3·2396
102	80	·8434	1·4640
103	81	·3839	·6206
104	82	·1672	·2367
105	83	·0695	·0695

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Male 85 Years older.**	
85	0	23,461·3	78,346·1
86	1	15,823·8	54,884·8
87	2	11,390·2	39,061·0
88	3	8,292·37	27,670·80
89	4	6,001·75	19,378·43
90	5	4,293·42	13,376·68
91	6	3,026·35	9,083·26
92	7	2,096·38	6,056·91
93	8	1,423·92	3,960·53
94	9	947·325	2,536·607
95	10	616·489	1,589·282
96	11	391·907	972·793
97	12	243·048	580·885
98	13	146·850	337·838
99	14	86·3279	190·9884
100	15	49·3117	104·6605
101	16	27·3337	55·3488
102	17	14·6833	28·0151
103	18	7·6341	13·3318
104	19	3·8365	5·6977
105	20	1·8612	1·8612

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 23 Years older than Female.

Male 84 Years older than Female.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 23 Years older.**	
23	0	1,130,260	17,083,171
24	1	941,141	15,952,911
25	2	849,449	15,011,770
26	3	788,241	14,162,321
27	4	739,812	13,374,080
28	5	698,855	12,634,268
29	6	663,005	11,935,413
30	7	630,611	11,272,408
31	8	600,574	10,641,797
32	9	572,650	10,041,223
33	10	546,490	9,468,573
34	11	521,803	8,922,083
35	12	498,352	8,400,280
36	13	475,943	7,901,928
37	14	454,423	7,425,985
38	15	433,669	6,971,562
39	16	413,589	6,537,893
40	17	394,115	6,124,304
41	18	375,199	5,730,189
42	19	356,811	5,354,990
43	20	338,935	4,998,179
44	21	321,569	4,659,244
45	22	304,861	4,337,675
46	23	288,795	4,032,814
47	24	273,351	3,744,019
48	25	258,512	3,470,668
49	26	244,259	3,212,156
50	27	230,576	2,967,897
51	28	217,446	2,737,321
52	29	204,737	2,519,875
53	30	192,536	2,315,138
54	31	180,834	2,122,602
55	32	169,620	1,941,768
56	33	158,876	1,772,148
57	34	148,586	1,613,272
58	35	138,731	1,464,686
59	36	129,292	1,325,955
60	37	120,253	1,196,663
61	38	111,596	1,076,410
62	39	103,306	964,814
63	40	95,370·5	861,508·0
64	41	87,778·7	766,137·5
65	42	80,521·9	678,358·8
66	43	73,593·8	597,836·9
67	44	66,990·5	524,243·1
68	45	60,710·3	457,252·6
69	46	54,752·9	396,542·3
70	47	49,120·1	341,789·4
71	48	43,814·5	292,669·3
72	49	38,839·1	248,854·8
73	50	34,197·4	210,015·7
74	51	29,892·0	175,818·3
75	52	25,924·5	145,926·3
76	53	22,294·9	120,001·8
77	54	19,000·8	97,706·9
78	55	16,013·1	78,706·1
79	56	13,346·0	62,693·0
80	57	10,992·4	49,347·0
81	58	8,940·58	38,354·63
82	59	7,174·89	29,414·05
83	60	5,676·33	22,239·16
84	61	4,423·08	16,562·83
85	62	3,391·33	12,139·75
86	63	2,556·02	8,748·42
87	64	1,891·67	6,192·40
88	65	1,373·20	4,300·73
89	66	976·618	2,927·532
90	67	679·666	1,950·914
91	68	462·275	1,271·248
92	69	306·882	808·973
93	70	198·574	502·091
94	71	125·067	303·517
95	72	76·5602	178·4502
96	73	45·4831	101·8900
97	74	26·1826	56·4069
98	75	14·5812	30·2243
99	76	7·8430	15·6431
100	77	4·0676	7·8001
101	78	2·0305	3·7325
102	79	·9739	1·7020
103	80	·4479	·7281
104	81	·1972	·2802
105	82	·0830	·0830
		Male 84 Years older.	
84	0	29,219·6	101,505·5
85	1	20,002·9	72,285·9
86	2	14,626·2	52,283·0
87	3	10,826·0	37,656·8
88	4	7,973·17	26,830·75
89	5	5,809·13	18,857·58
90	6	4,174·27	13,048·45
91	7	2,950·49	8,874·18
92	8	2,046·88	5,923·69
93	9	1,392·25	3,876·81
94	10	927·249	2,484·564
95	11	603·890	1,557·315
96	12	384·089	953·425
97	13	238·259	569·336
98	14	143·961	331·077
99	15	84·6165	187·1162
100	16	48·3187	102·4997
101	17	26·7711	54·1810
102	18	14·3731	27·4099
103	19	7·4681	13·0368
104	20	3·7505	5·5687
105	21	1·8182	1·8182

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 24 Years older than Female.

Male 83 Years older than Female.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 24 Years older.**	
24	0	1,103,858	16,564,468
25	1	918,998	15,460,610
26	2	829,320	14,541,612
27	3	769,429	13,712,292
28	4	722,027	12,942,863
29	5	681,931	12,220,836
30	6	646,826	11,538,905
31	7	615,100	10,892,079
32	8	585,678	10,276,979
33	9	558,322	9,691,301
34	10	532,689	9,132,979
35	11	508,496	8,600,290
36	12	485,509	8,091,794
37	13	463,541	7,606,285
38	14	442,440	7,142,744
39	15	422,089	6,700,304
40	16	402,397	6,278,215
41	17	383,297	5,875,818
42	18	364,744	5,492,521
43	19	346,708	5,127,777
44	20	329,176	4,781,069
45	21	312,143	4,451,893
46	22	295,757	4,139,750
47	23	280,000	3,843,993
48	24	264,854	3,563,993
49	25	250,302	3,299,139
50	26	236,327	3,048,837
51	27	222,912	2,812,510
52	28	209,924	2,589,598
53	29	197,452	2,379,674
54	30	185,488	2,182,222
55	31	174,018	1,996,734
56	32	163,028	1,822,716
57	33	152,500	1,659,688
58	34	142,415	1,507,188
59	35	132,754	1,364,773
60	36	123,500	1,232,019
61	37	114,636	1,108,519
62	38	106,145	993,883
63	39	98,016·5	887,738·4
64	40	90,237·7	789,721·9
65	41	82,800·3	699,484·2
66	42	75,698·0	616,683·9
67	43	68,926·8	540,985·9
68	44	62,484·9	472,059·1
69	45	56,372·4	409,574·2
70	46	50,590·9	353,201·8
71	47	45,143·3	302,610·9
72	48	40,032·8	257,467·6
73	49	35,263·0	217,434·8
74	50	30,837·0	182,171·8
75	51	26,756·4	151,334·8
76	52	23,021·5	124,578·4
77	53	19,630·1	101,556·9
78	54	16,577·6	81,926·8
79	55	13,835·0	65,349·2
80	56	11,411·0	51,514·2
81	57	9,294·81	40,103·24
82	58	7,471·03	30,808·43
83	59	5,920·82	23,337·40
84	60	4,622·30	17,416·58
85	61	3,551·42	12,794·28
86	62	2,682·79	9,242·86
87	63	1,990·50	6,560·07
88	64	1,448·96	4,569.57
89	65	1,033·66	3,120·61
90	66	721·801	2,086·945
91	67	492·759	1,365·144
92	68	328·456	872·385
93	69	213·484	543·929
94	70	135·115	330·445
95	71	83·1518	195·3303
96	72	49·6853	112·1785
97	73	28·7813	62·4932
98	74	16·1375	33·7119
99	75	8·7438	17·5744
100	76	4·5706	8·8306
101	77	2·3010	4·2600
102	78	1·1137	1·9590
103	79	·5173	·8453
104	80	·2301	·3280
105	81	·0979	·0979

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 83 Years older.**	
83	0	35,882·6	129,709·4
84	1	24,912·4	93,826·8
85	2	18,489·1	68,914·4
86	3	13,901·7	50,425·3
87	4	10,409·3	36,523·6
88	5	7,717·29	26,114·32
89	6	5,647·91	18,397·03
90	7	4,069·63	12,749·12
91	8	2,880·81	8,679·49
92	9	2,001·35	5,798·68
93	10	1,362·74	3,797·33
94	11	908·300	2,434·587
95	12	591·843	1,526·287
96	13	376·521	934·444
97	14	233·573	557·923
98	15	141·107	324·350
99	16	82·9125	183·2430
100	17	47·3243	100·3305
101	18	26·2055	53·0062
102	19	14·0605	26·8007
103	20	7·3006	12·7402
104	21	3·6638	5·4396
105	22	1·7758	1·7758

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 25 Years older than Female.

Male 82 Years older than Female.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Male 25 Years older.**	
25	0	1,077,886	16,054,456
26	1	897,222	14,976,570
27	2	809,528	14,079,348
28	3	750,933	13,269,820
29	4	704,542	12,518,887
30	5	665,290	11,814,345
31	6	630,916	11,149,055
32	7	599,844	10,518,139
33	8	571,024	9,918,295
34	9	544,223	9,347,271
35	10	519,104	8,803,048
36	11	495,392	8,283,944
37	12	472,857	7,788,552
38	13	451,318	7,315,695
39	14	430,626	6,864,377
40	15	410,666	6,433,751
41	16	391,351	6,023,085
42	17	372,616	5,631,734
43	18	354,416	5,259,118
44	19	336,725	4,904,702
45	20	319,527	4,567,977
46	21	302,822	4,248,450
47	22	286,750	3,945,628
48	23	271,296	3,658,878
49	24	256,442	3,387,582
50	25	242,173	3,131,140
51	26	228,471	2,888,967
52	27	215,201	2,660,496
53	28	202,454	2,445,295
54	29	190,224	2,242,841
55	30	178,496	2,052,617
56	31	167,256	1,874,121
57	32	156,486	1,706,865
58	33	146,167	1,550,379
59	34	136,280	1,404,212
60	35	126,807	1,267,932
61	36	117,731	1,141,125
62	37	109,037	1,023,394
63	38	100,711	914,357
64	39	92,741·3	813,645·9
65	40	85,119·8	720,904·6
66	41	77,839·9	635,784·8
67	42	70,897·5	557,944·9
68	43	64,291·0	487,047·4
69	44	58,020·3	422,756·4
70	45	52,087·3	364,736·1
71	46	46,495·0	312,648·8
72	47	41,246·9	266,153·8
73	48	36,346·8	224,906·9
74	49	31,797·9	188,560·1
75	50	27,602·2	156,762·2
76	51	23,760·2	129,160·0
77	52	20,269·9	105,399·8
78	53	17,126·6	85,129·9
79	54	14,322·7	68,003·3
80	55	11,829·1	53,680·6
81	56	9,648·78	41,851·50
82	57	7,767·03	32,202·72
83	58	6,165·19	24,435·69
84	59	4,821·39	18,270·50
85	60	3,711·38	13,449·11
86	61	2,809·44	9,737·73
87	62	2,089·22	6,928·29
88	63	1,524·66	4,839·07
89	64	1,090·70	3,314·41
90	65	763·963	2,223·706
91	66	523·307	1,459·743
92	67	350·116	936·436
93	68	228·492	586·320
94	69	145·261	357·828
95	70	89·8324	212·5667
96	71	53·9631	122·7343
97	72	31·4404	68·7712
98	73	17·7392	37·3308
99	74	9·6770	19·5916
100	75	5·0956	9·9146
101	76	2·5856	4·8190
102	77	1·2620	2·2334
103	78	·5915	·9714
104	79	·2657	·3799
105	80	·1142	·1142
		Male 82 Years older.	
82	0	43,482·8	163,597·9
83	1	30,593·3	120,115·1
84	2	23,027·1	89,521·8
85	3	17,573·3	66,494·7
86	4	13,366·6	48,921·4
87	5	10,075·2	35,554·8
88	6	7,503·11	25,479·55
89	7	5,506·33	17,976·44
90	8	3,973·52	12,470·11
91	9	2,816·73	8,496·59
92	10	1,958·93	5,679·86
93	11	1,334·89	3,720·93
94	12	890·180	2,386·041
95	13	580·182	1,495·861
96	14	369·115	915·679
97	15	228·942	546·564
98	16	138·266	317·622
99	17	81·2061	179·3555
100	18	46·3244	98·1494
101	19	25·6356	51·8250
102	20	13·7452	26·1894
103	21	7·1319	12·4442
104	22	3·5783	5·3123
105	23	1·7340	1·7340

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 26 Years older than Female.

Male 81 Years older than Female.

Male 26 Years older.

Ages *x*	Ages *y*	$D_{x, y}$	$N_{x, y}$
26	0	1,052,345	15,553,035
27	1	875,809	14,500,690
28	2	790,068	13,624,881
29	3	732,748	12,834,813
30	4	687,349	12,102,065
31	5	648,926	11,414,716
32	6	615,268	10,765,790
33	7	584,835	10,150,522
34	8	556,603	9,565,687
35	9	530,343	9,009,084
36	10	505,727	8,478,741
37	11	482,482	7,973,014
38	12	460,389	7,490,532
39	13	439,267	7,030,143
40	14	418,972	6,590,876
41	15	399,394	6,171,904
42	16	380,446	5,772,510
43	17	362,066	5,392,064
44	18	344,211	5,029,998
45	19	326,855	4,685,787
46	20	309,985	4,358,932
47	21	293,599	4,048,947
48	22	277,836	3,755,348
49	23	262,680	3,477,512
50	24	248,114	3,214,832
51	25	234,123	2,966,718
52	26	220,568	2,732,595
53	27	207,544	2,512,027
54	28	195,043	2,304,483
55	29	183,054	2,109,440
56	30	171,560	1,926,386
57	31	160,544	1,754,826
58	32	149,987	1,594,282
59	33	139,870	1,444,295
60	34	130,175	1,304,425
61	35	120,884	1,174,250
62	36	111,982	1,053,366
63	37	103,454	941,384
64	38	95,290·5	837,929·9
65	39	87,481·4	742,639·4
66	40	80,020·5	655,158·0
67	41	72,903·6	575,137·5
68	42	66,129·2	502,233·9
69	43	59,697·3	436,104·7
70	44	53,610·0	376,407·4
71	45	47,870·2	322,797·4
72	46	42,482·0	274,927·2
73	47	37,449·1	232,445·2
74	48	32,775·2	194,996·1
75	49	28,462·4	162,220·9
76	50	24,511·3	133,758·5
77	51	20,920·3	109,247·2
78	52	17,684·8	88,326·9
79	53	14,797·1	70,642·1
80	54	12,246·1	55,845·0
81	55	10,002·3	43,598·9
82	56	8,062·83	33,596·61
83	57	6,409·46	25,533·78
84	58	5,020·38	19,124·32
85	59	3,871·23	14,103·94
86	60	2,935·97	10,232·71
87	61	2,187·85	7,296·74
88	62	1,600·28	5,108·89
89	63	1,147·68	3,508·61
90	64	806·113	2,360·927
91	65	553·875	1,554·814
92	66	371·821	1,000·939
93	67	243·560	629·118
94	68	155·472	385·558
95	69	96·5777	230·0856
96	70	58·2986	133·5079
97	71	34·1474	75·2093
98	72	19·3781	41·0619
99	73	10·6375	21·6838
100	74	5·6395	11·0463
101	75	2·8826	5·4068
102	76	1·4181	2·5242
103	77	·6703	1·1061
104	78	·3039	·4358
105	79	·1319	·1319

Male 81 Years older.

Ages *x*	Ages *y*	$D_{x, y}$	$N_{x, y}$
81	0	52,035·9	203,802·5
82	1	37,073·2	151,766·6
83	2	28,278·0	114,693·4
84	3	21,886·4	86,415·4
85	4	16,896·8	64,529·0
86	5	12,937·6	47,632·2
87	6	9,795·57	34,694·63
88	7	7,315·02	24,899·06
89	8	5,376·29	17,584·04
90	9	3,885·13	12,207·75
91	10	2,757·04	8,322·62
92	11	1,918·90	5,565·58
93	12	1,308·27	3,646·68
94	13	872·641	2,338·409
95	14	568·770	1,465·768
96	15	361·798	896·998
97	16	224·332	535·200
98	17	135·420	310·868
99	18	79·4905	175·4482
100	19	45·3169	95·9577
101	20	25·0608	50·6408
102	21	13·4276	25·5800
103	22	6·9655	12·1524
104	23	3·4941	5·1869
105	24	1·6928	1·6928

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 27 Years older than Female.

Male 80 Years older than Female.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
Male 27 Years older.			
27	0	1,027,230	15,060,097
28	1	854,756	14,032,867
29	2	770,935	13,178,111
30	3	714,866	12,407,176
31	4	670,442	11,692,310
32	5	632,831	11,021,868
33	6	599,873	10,389,037
34	7	570,066	9,789,164
35	8	542,408	9,219,098
36	9	516,676	8,676,690
37	10	492,548	8,160,014
38	11	469,760	7,667,466
39	12	448,095	7,197,706
40	13	427,379	6,749,611
41	14	407,472	6,322,232
42	15	388,265	5,914,760
43	16	369,674	5,526,495
44	17	351,640	5,156,821
45	18	334,122	4,805,181
46	19	317,094	4,471,059
47	20	300,545	4,153,965
48	21	284,473	3,853,420
49	22	269,012	3,568,947
50	23	254,149	3,299,935
51	24	239,867	3,045,786
52	25	226,024	2,805,919
53	26	212,720	2,579,895
54	27	199,946	2,367,175
55	28	187,692	2,167,229
56	29	175,941	1,979,537
57	30	164,675	1,803,596
58	31	153,877	1,638,921
59	32	143,526	1,485,044
60	33	133,604	1,341,518
61	34	124,094	1,207,914
62	35	114,980	1,083,820
63	36	106,248	968,840
64	37	97,886·3	862,592·2
65	38	89,886·0	764,705·9
66	39	82,240·5	674,819·9
67	40	74,945·9	592,579·4
68	41	68,000·3	517,633·5
69	42	61,404·2	449,633·2
70	43	55,159·5	388,229·0
71	44	49,269·6	333,069·5
72	45	43,738·5	283,799·9
73	46	38,570·5	240,061·4
74	47	33,769·1	201,490·9
75	48	29,337·1	167,721·8
76	49	25,275·1	138,384·7
77	50	21,581·7	113,109·6
78	51	18,252·3	91,527·9
79	52	15,279·3	73,275·6
80	53	12,651·7	57,996·3
81	54	10,354·9	45,344·6
82	55	8,358·23	34,989·74
83	56	6,653·55	26,631·51
84	57	5,219·29	19,977·96
85	58	4,031·01	14,758·67
86	59	3,062·43	10,727·66
87	60	2,286·39	7,665·23
88	61	1,675·83	5,378·84
89	62	1,204·60	3,703·01
90	63	848·228	2,498·406
91	64	584·434	1,650·178
92	65	393·540	1,065·744
93	66	258·659	672·204
94	67	165·725	413·545
95	68	103·367	247·820
96	69	62·6761	144·4525
97	70	36·8908	81·7764
98	71	21·0465	44·8856
99	72	11·6203	23·8391
100	73	6·1992	12·2188
101	74	3·1902	6·0196
102	75	1·5810	2·8294
103	76	·7532	1·2484
104	77	·3444	·4952
105	78	·1508	·1508
Male 80 Years older.			
80	0	61,539·7	250,933·9
81	1	44,365·4	189,394·2
82	2	34,267·5	145,028·8
83	3	26,877·3	110,761·3
84	4	21,044·0	83,884·0
85	5	16,354·5	62,840·0
86	6	12,578·6	46,485·5
87	7	9,550·01	33,906·86
88	8	7,142·26	24,356·85
89	9	5,256·70	17,214·59
90	10	3,802·80	11,957·89
91	11	2,700·70	8,155·09
92	12	1,880·62	5,454·39
93	13	1,282·49	3,573·77
94	14	855·476	2,291·280
95	15	557·494	1,435·804
96	16	354·512	878·310
97	17	219·715	523·798
98	18	132·559	304·083
99	19	77·7616	171·5235
100	20	44·3009	93·7619
101	21	24·4817	49·4610
102	22	13·1144	24·9793
103	23	6·8016	11·8649
104	24	3·4111	5·0633
105	25	1·6522	1·6522

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 28 Years older than Female.
Male 79 Years older than Female.

Male 28 Years older.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
28	0	1,002,536	14,575,537
29	1	834,056	13,573,001
30	2	752,122	12,738,945
31	3	697,283	11,986,823
32	4	653,813	11,289,540
33	5	616,997	10,635,727
34	6	584,724	10,018,730
35	7	555,528	9,434,006
36	8	528,430	8,878,478
37	9	503,212	8,350,048
38	10	479,560	7,846,836
39	11	457,216	7,367,276
40	12	435,969	6,910,060
41	13	415,648	6,474,091
42	14	396,117	6,058,443
43	15	377,271	5,662,326
44	16	359,029	5,285,055
45	17	341,333	4,926,026
46	18	324,144	4,584,693
47	19	307,437	4,260,549
48	20	291,202	3,953,112
49	21	275,438	3,661,910
50	22	260,276	3,386,472
51	23	245,701	3,126,196
52	24	231,569	2,880,495
53	25	217,982	2,648,926
54	26	204,933	2,430,944
55	27	192,410	2,226,011
56	28	180,398	2,033,601
57	29	168,880	1,853,203
58	30	157,836	1,684,323
59	31	147,248	1,526,487
60	32	137,096	1,379,239
61	33	127,364	1,242,143
62	34	118,034	1,114,779
63	35	109,093	996,745
64	36	100,530	887,652
65	37	92,334·6	787,121·7
66	38	84,501·1	694,787·1
67	39	77,025·2	610,286·0
68	40	69,905·2	533,260·8
69	41	63,141·6	463,355·6
70	42	56,736·6	400,214·0
71	43	50,693·6	343,477·4
72	44	45,017·1	292,783·8
73	45	39,711·3	247,766·7
74	46	34,780·3	208,055·4
75	47	30,226·8	173,275·1
76	48	26,051·9	143,048·3
77	49	22,254·2	116,996·4
78	50	18,829·3	94,742·2
79	51	15,769·6	75,912·9
80	52	13,064·0	60,143·3
81	53	10,697·8	47,079·3
82	54	8,652·89	36,381·45
83	55	6,897·32	27,728·56
84	56	5,418·06	20,831·24
85	57	4,190·72	15,413·18
86	58	3,188·82	11,222·46
87	59	2,384·87	8,033·64
88	60	1,751·30	5,648·77
89	61	1,261·47	3,897·47
90	62	890·299	2,635·998
91	63	614·967	1,745·699
92	64	415·253	1,130·732
93	65	273·768	715·479
94	66	175·999	441·711
95	67	110·184	265·712
96	68	67·0822	155·5275
97	69	39·6609	88·4453
98	70	22·7375	48·7844
99	71	12·6208	26·0469
100	72	6·7719	13·4261
101	73	3·5069	6·6542
102	74	1·7498	3·1473
103	75	·8397	1·3975
104	76	·3869	·5578
105	77	·1709	·1709

Male 79 Years older.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
79	0	71,975·1	305,567·0
80	1	52,468·3	233,591·9
81	2	41,007·9	181,123·6
82	3	32,570·1	140,115·7
83	4	25,842·7	107,545·6
84	5	20,368·6	81,702·9
85	6	15,900·7	61,334·3
86	7	12,263·3	45,433·6
87	8	9,324·47	33,170·25
88	9	6,983·40	23,845·78
89	10	5,145·30	16,862·38
90	11	3,725·09	11,717·08
91	12	2,646·82	7,991·99
92	13	1,843·57	5,345·17
93	14	1,257·26	3,501·60
94	15	838·517	2,244·344
95	16	546·268	1,405·827
96	17	347·216	859·559
97	18	215·073	512·343
98	19	129·676	297·270
99	20	76·0182	167·5936
100	21	43·2772	91·5754
101	22	23·9106	48·2982
102	23	12·8056	24·3876
103	24	6·6401	11·5820
104	25	3·3295	4·9419
105	26	1·6124	1·6124

JOINT LIVES:—Male and Female Life.

Male 29 Years older than Female.

Male 78 Years older than Female.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 29 Years older.**	
29	0	978,258	14,099,249
30	1	813,703	13,120,991
31	2	733,622	12,307,288
32	3	679,988	11,573,666
33	4	637,455	10,893,678
34	5	601,415	10,256,223
35	6	569,812	9,654,808
36	7	541,211	9,084,996
37	8	514,660	8,543,785
38	9	489,943	8,029,125
39	10	466,755	7,539,182
40	11	444,843	7,072,427
41	12	424,002	6,627,584
42	13	404,065	6,203,582
43	14	384,902	5,799,517
44	15	366,408	5,414,615
45	16	348,506	5,048,207
46	17	331,140	4,699,701
47	18	314,273	4,368,561
48	19	297,880	4,054,288
49	20	281,954	3,756,408
50	21	266,493	3,474,454
51	22	251,624	3,207,961
52	23	237,202	2,956,337
53	24	223,329	2,719,135
54	25	210,002	2,495,806
55	26	197,208	2,285,804
56	27	184,933	2,088,596
57	28	173,159	1,903,663
58	29	161,866	1,730,504
59	30	151,037	1,568,638
60	31	140,651	1,417,601
61	32	130,692	1,276,950
62	33	121,143	1,146,258
63	34	111,990	1,025,115
64	35	103,222	913,125
65	36	94,828·1	809,902·9
66	37	86,803·1	715,074·8
67	38	79,142·4	628,271·7
68	39	71,844·7	549,129·3
69	40	64,910·4	477,284·6
70	41	58,342·0	412,374·2
71	42	52,143·1	354,032·2
72	43	46,318·2	301,889·1
73	44	40,872·2	255,570·9
74	45	35,809·0	214,698·7
75	46	31,131·9	178,889·7
76	47	26,842·0	147,757·8
77	48	22,938·1	120,915·8
78	49	19,416·0	97,977·7
79	50	16,268·1	78,561·7
80	51	13,483·2	62,293·6
81	52	11,046·5	48,810·4
82	53	8,939·46	37,763·92
83	54	7,140·48	28,824·46
84	55	5,616·56	21,683·98
85	56	4,350·32	16,067·42
86	57	3,315·17	11,717·10
87	58	2,483·30	8,401·93
88	59	1,826·74	5,918·63
89	60	1,318·28	4,091·89
90	61	932·326	2,773·606
91	62	645·469	1,841·280
92	63	436·947	1,195·811
93	64	288·873	758·864
94	65	186·280	469·991
95	66	117·014	283·711
96	67	71·5059	166·6965
97	68	42·4490	95·1906
98	69	24·4448	52·7416
99	70	13·6348	28·2968
100	71	7·3550	14·6620
101	72	3·8308	7·3070
102	73	1·9234	3·4762
103	74	·9294	1·5528
104	75	·4314	·6234
105	76	·1920	·1920
		Male 78 Years older.	
78	0	83,306·3	368,229·6
79	1	61,365·4	284,923·3
80	2	48,497·5	223,557·9
81	3	38,976·6	175,060·4
82	4	31,316·4	136,083·8
83	5	25,013·3	104,767·4
84	6	19,803·3	79,754·1
85	7	15,502·1	59,950·8
86	8	11,973·6	44,448·7
87	9	9,117·07	32,475·10
88	10	6,835·41	23,358·03
89	11	5,040·15	16,522·62
90	12	3,650·78	11,482·47
91	13	2,594·67	7,831·69
92	14	1,807·30	5,237·02
93	15	1,232·34	3,429·72
94	16	821·631	2,197·382
95	17	535·025	1,375·751
96	18	339·880	840·726
97	19	210·395	500·846
98	20	126·769	290·451
99	21	74·2615	163·6817
100	22	42·2676	89·4202
101	23	23·3477	47·1526
102	24	12·5016	23·8049
103	25	6·4811	11·3033
104	26	3·2491	4·8222
105	27	1·5731	1·5731

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 30 Years older than Female.

Male 77 Years older than Female.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Male 30 Years older.**	
30	0	954,386	13,631,127
31	1	793,688	12,676,741
32	2	715,426	11,883,053
33	3	662,974	11,167,627
34	4	621,356	10,504,653
35	5	586,077	9,883,297
36	6	555,127	9,297,220
37	7	527,108	8,742,093
38	8	501,089	8,214,985
39	9	476,860	7,713,896
40	10	454,124	7,237,036
41	11	432,632	6,782,912
42	12	412,187	6,350,280
43	13	392,625	5,938,093
44	14	373,819	5,545,468
45	15	355,668	5,171,649
46	16	338,099	4,815,981
47	17	321,056	4,477,882
48	18	304,503	4,156,826
49	19	288,420	3,852,323
50	20	272,797	3,563,903
51	21	257,635	3,291,106
52	22	242,920	3,033,471
53	23	228,762	2,790,551
54	24	215,154	2,561,789
55	25	202,087	2,346,635
56	26	189,545	2,144,548
57	27	177,511	1,955,003
58	28	165,967	1,777,492
59	29	154,893	1,611,525
60	30	144,271	1,456,632
61	31	134,082	1,312,361
62	32	124,310	1,178,279
63	33	114,941	1,053,969
64	34	105,963	939,028
65	35	97,367·4	833,064·7
66	36	89,147·2	735,697·3
67	37	81,298·4	646,550·1
68	38	73,819·5	565,251·7
69	39	66,711·3	491,432·2
70	40	59,976·3	424,720·9
71	41	53,618·5	364,744·6
72	42	47,642·6	311,126·1
73	43	42,053·5	263,483·5
74	44	36,855·8	221,430·0
75	45	32,052·8	184,574·2
76	46	27,645·8	152,521·4
77	47	23,633·8	124,875·6
78	48	20,012·7	101,241·8
79	49	16,775·1	81,229·1
80	50	13,909·5	64,454·0
81	51	11,401·0	505,44·5
82	52	9,230·80	391,43·51
83	53	7,376·96	29,912·71
84	54	5,814·57	22,535·75
85	55	4,509·70	16,721·18
86	56	3,441·42	12,211·48
87	57	2,581·69	8,770·06
88	58	1,902·13	6,188·37
89	59	1,375·06	4,286·24
90	60	974·318	2,911·177
91	61	675·939	1,936·859
92	62	458·619	1,260·920
93	63	303·965	802·301
94	64	196·557	498·336
95	65	123·849	301·779
96	66	75·9389	177·9298
97	67	45·2483	101·9909
98	68	26·1632	56·7426
99	69	14·6586	30·5794
100	70	7·9459	15·9208
101	71	4·1607	7·9749
102	72	2·1011	3·8142
103	73	1·0216	1·7131
104	74	·4774	·6915
105	75	·2141	·2141
		Male 77 Years older.	
77	0	95,483·7	439,394·4
78	1	71,026·4	343,910·7
79	2	56,721·3	272,884·3
80	3	46,095·3	216,163·0
81	4	37,476·3	170,067·7
82	5	30,311·3	132,591·4
83	6	24,319·1	102,280·1
84	7	19,306·9	77,961·0
85	8	15,135·9	58,654·1
86	9	11,707·3	43,518·2
87	10	8,923·86	31,810·93
88	11	6,695·72	22,887·07
89	12	4,939·61	16,191·35
90	13	3,578·84	11,251·74
91	14	2,543·63	7,672·90
92	15	1,771·48	5,129·27
93	16	1,207·52	3,357·79
94	17	804·721	2,150·274
95	18	523·722	1,345·553
96	19	332·488	821·831
97	20	205·678	489·343
98	21	123·839	283·665
99	22	72·5291	159·8264
100	23	41·2726	87·2973
101	24	22·7933	46·0247
102	25	12·2022	23·2314
103	26	6·3246	11·0292
104	27	3·1700	4·7046
105	28	1·5346	1·5346

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 31 Years older than Female.

Male 76 Years older than Female.

Ages		$D_{x,y}$	$N_{x,y}$	Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Male 31 Years older.**		x	y	**Male 31 Years older.**	
31	0	930,911	13,171,055	86	55	3,567·50	12,705·51
32	1	774,002	12,240,144	87	56	2,680·01	9,138·01
33	2	697,525	11,466,142	88	57	1,977·49	6,458·00
34	3	646,232	10,768,617	89	58	1,431·82	4,480·51
35	4	605,510	10,122,385	90	59	1,016·28	3,048·69
36	5	570,974	9,516,875	91	60	706·383	2,032·405
37	6	540,661	8,945,901	92	61	480·269	1,326·022
38	7	513,209	8,405,240	93	62	319·041	845·753
39	8	487,708	7,892,031	94	63	206·826	526·712
40	9	463,956	7,404,323	95	64	130·683	319·886
41	10	441,658	6,940,367	96	65	80·3747	189·2030
42	11	420,577	6,498,709	97	66	48·0534	108·8283
43	12	400,516	6,078,132	98	67	27·8886	60·7749
44	13	381,319	5,677,616	99	68	15·6891	32·8863
45	14	362,862	5,296,297	100	69	8·5425	17·1972
46	15	345,047	4,933,435	101	70	4·4950	8·6547
47	16	327,802	4,588,388	102	71	2·2820	4·1597
48	17	311,075	4,260,586	103	72	1·1160	1·8777
49	18	294,832	3,949,511	104	73	·5248	·7617
50	19	279,053	3,654,679	105	74	·2369	·2369
51	20	263,729	3,375,626				
52	21	248,722	3,111,897				
53	22	234,276	2,863,175			**Male 76 Years older.**	
54	23	220,387	2,628,899				
55	24	207,044	2,408,512				
56	25	194,234	2,201,468	76	0	108,445	519,469
57	26	181,938	2,007,234	77	1	81,408·8	411,024·1
58	27	170,139	1,825,296	78	2	65,651·1	329,615·3
59	28	158,818	1,655,157	79	3	53,911·7	263,964·2
60	29	147,954	1,496,339	80	4	44,320·9	210,052·5
61	30	137,532	1,348,385	81	5	36,273·5	165,731·6
62	31	127,533	1,210,853	82	6	29,470·1	129,458·1
63	32	117,945	1,083,320	83	7	23,709·5	99,988·0
64	33	108,755	965,375	84	8	18,850·9	76,278·5
65	34	99,953·3	856,620·4	85	9	14,799·3	57,427·6
66	35	91,534·4	756,667·1	86	10	11,459·2	42,628·3
67	36	83,493·8	665,132·7	87	11	8,741·49	31,169·05
68	37	75,830·5	581,638·9	88	12	6,562·15	22,427·56
69	38	68,545·0	505,808·4	89	13	4,842·29	15,865·41
70	39	61,640·3	437,263·4	90	14	3,508·45	11,023·12
71	40	55,120·5	375,623·1	91	15	2,493·21	7,514·67
72	41	48,990·6	320,502·6	92	16	1,735·80	5,021·46
73	42	43,255·9	271,512·0	93	17	1,182·67	3,285·66
74	43	37,921·1	228,256·1	94	18	787·719	2,102·988
75	44	32,989·7	190,335·0	95	19	512·331	1,315·269
76	45	28,463·5	157,345·3	96	20	325·034	802·938
77	46	24,341·5	128,881·8	97	21	200·925	477·904
78	47	20,619·7	104,540·3	98	22	120·950	276·979
79	48	17,290·6	83,920·6	99	23	70·8217	156·0289
80	49	14,342·9	66,630·0	100	24	40·2925	85·2072
81	50	11,761·4	52,287·1	101	25	22·2475	44·9147
82	51	9,527·01	40,525·73	102	26	11·9076	22·6672
83	52	7,617·38	30,998·72	103	27	6·1707	10·7596
84	53	6,007·14	23,381·34	104	28	3·0923	4·5889
85	54	4,668·69	17,374·20	105	29	1·4966	1·4966

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 32 Years older than Female.

Male 75 Years older than Female.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
		Male 32 Years older.	
32	0	907,822	12,718,946
33	1	754,636	11,811,124
34	2	679,910	11,056,488
35	3	629,751	10,376,578
36	4	589,906	9,746,827
37	5	556,095	9,156,921
38	6	526,405	8,600,826
39	7	499,505	8,074,421
40	8	474,510	7,574,916
41	9	451,220	7,100,406
42	10	429,351	6,649,186
43	11	408,669	6,219,835
44	12	388,983	5,811,166
45	13	370,143	5,422,183
46	14	352,026	5,052,040
47	15	334,539	4,700,014
48	16	317,612	4,365,475
49	17	301,196	4,047,863
50	18	285,257	3,746,667
51	19	269,778	3,461,410
52	20	254,606	3,191,632
53	21	239,872	2,937,026
54	22	225,700	2,697,154
55	23	212,080	2,471,454
56	24	198,999	2,259,374
57	25	186,439	2,060,375
58	26	174,382	1,873,936
59	27	162,810	1,699,554
60	28	151,703	1,536,744
61	29	141,043	1,385,041
62	30	130,815	1,243,998
63	31	121,003	1,113,183
64	32	111,597	992,180
65	33	102,586	880,583
66	34	93,965·3	777,997·1
67	35	85,729·6	684,031·8
68	36	77,878·3	598,302·2
69	37	70,412·3	520,423·9
70	38	63,334·7	450,011·6
71	39	56,649·8	386,676·9
72	40	50,363·0	330,027·1
73	41	44,479·9	279,664·1
74	42	39,005·3	235,184·2
75	43	33,943·2	196,178·9
76	44	29,295·5	162,235·7
77	45	25,061·4	132,940·2
78	46	21,237·1	107,878·8
79	47	17,815·0	86,641·7
80	48	14,783·7	68,826·7
81	49	12,127·9	54,043·0
82	50	9,828·18	41,915·14
83	51	7,861·81	32,086·96
84	52	6,202·91	24,225·15
85	53	4,823·31	18,022·24
86	54	3,693·27	13,198·93
87	55	2,778·19	9,505·66
88	56	2,052·80	6,727·47
89	57	1,488·54	4,674·67
90	58	1,058·23	3,186·13
91	59	736·808	2,127·902
92	60	501·900	1,391·094
93	61	334·102	889·194
94	62	217·084	555·092
95	63	137·510	338·008
96	64	84·8092	200·4975
97	65	50·8603	115·6883
98	66	29·6175	64·8280
99	67	16·7237	35·2105
100	68	9·1431	18·4868
101	69	4·8325	9·3437
102	70	2·4654	4·5112
103	71	1·2121	2·0458
104	72	·5733	·8337
105	73	·2604	·2604
		Male 75 Years older.	
75	0	122,121	608,795
76	1	92,459·8	486,674·0
77	2	75,247·8	394,214·2
78	3	62,399·2	318,966·4
79	4	51,836·5	256,567·2
80	5	42,898·5	204,730·7
81	6	35,266·8	161,832·2
82	7	28,731·3	126,565·4
83	8	23,149·5	97,834·1
84	9	18,431·6	74,684·6
85	10	14,485·7	56,253·0
86	11	11,225·0	41,767·3
87	12	8,567·11	30,542·25
88	13	6,432·86	21,975·14
89	14	4,747·04	15,542·28
90	15	3,438·89	10,795·24
91	16	2,443·00	7,356·35
92	17	1,700·08	4,913·35
93	18	1,157·68	3,213·27
94	19	770·587	2,055·586
95	20	500·845	1,284·999
96	21	317·522	784·154
97	22	196·238	466·632
98	23	118·103	270·394
99	24	69·1400	152·2908
100	25	39·3277	83·1508
101	26	21·7105	43·8231
102	27	11·6179	22·1126
103	28	6·0194	10·4947
104	29	3·0159	4·4753
105	30	1·4594	1·4594

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 33 Years older than Female.

Male 74 Years older than Female.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Male 33 Years older.**	
33	0	885,107	12,274,693
34	1	735,579	11,389,586
35	2	662,570	10,654,007
36	3	613,522	9,991,437
37	4	574,533	9,377,915
38	5	541,432	8,803,382
39	6	512,349	8,261,950
40	7	485,987	7,749,601
41	8	461,485	7,263,614
42	9	438,647	6,802,129
43	10	417,194	6,363,482
44	11	396,901	5,946,288
45	12	377,582	5,549,387
46	13	359,089	5,171,805
47	14	341,305	4,812,716
48	15	324,139	4,471,411
49	16	307,525	4,147,272
50	17	291,414	3,839,747
51	18	275,776	3,548,333
52	19	260,445	3,272,557
53	20	245,547	3,012,112
54	21	231,091	2,766,565
55	22	217,193	2,535,474
56	23	203,839	2,318,281
57	24	191,013	2,114,442
58	25	178,696	1,923,429
59	26	166,870	1,744,733
60	27	155,516	1,577,863
61	28	144,617	1,422,347
62	29	134,155	1,277,730
63	30	124,117	1,143,575
64	31	114,491	1,019,458
65	32	105,268	904,967
66	33	96,440·7	799,698·8
67	34	88,006·4	703,258·1
68	35	79,963·7	615,251·7
69	36	72,313·8	535,288·0
70	37	65,060·0	462,974·2
71	38	58,206·9	397,914·2
72	39	51,760·3	339,707·3
73	40	45,725·9	287,947·0
74	41	40,109·0	242,221·1
75	42	34,913·7	202,112·1
76	43	30,142·3	167,198·4
77	44	25,794·0	137,056·1
78	45	21,865·3	111,262·1
79	46	18,348·4	89,396·8
80	47	15,232·1	71,048·4
81	48	12,500·6	55,816·3
82	49	10,134·4	43,315·7
83	50	8,110·35	33,181·29
84	51	6,401·96	25,070·94
85	52	4,980·50	18,668·98
86	53	3,815·59	13,688·48
87	54	2,876·14	9,872·89
88	55	2,128·01	6,996·75
89	56	1,545·23	4,868·74
90	57	1,100·16	3,323·51
91	58	767·218	2,223·347
92	59	523·517	1,456·129
93	60	349·150	932·612
94	61	227·332	583·462
95	62	144·330	356·130
96	63	89·2400	211·7998
97	64	53·6665	122·5598
98	65	31·3475	68·8933
99	66	17·7604	37·5458
100	67	9·7460	19·7854
101	68	5·1722	10·0394
102	69	2·6505	4·8672
103	70	1·3095	2·2167
104	71	·6227	·9072
105	72	·2845	·2845

Male 74 Years older.

x	y	$D_{x, y}$	$N_{x, y}$
74	0	136,432	707,639
75	1	104,119	571,207
76	2	85,462·5	467,087·9
77	3	71,520·5	381,625·4
78	4	59,997·3	310,104·9
79	5	50,172·9	250,107·6
80	6	41,708·0	199,934·7
81	7	34,382·8	158,226·7
82	8	28,052·8	123,843·9
83	9	22,634·6	95,791·1
84	10	18,041·0	73,156·5
85	11	14,189·6	55,115·5
86	12	11,001·1	40,925·9
87	13	8,398·32	29,924·82
88	14	6,306·32	21,526·50
89	15	4,652·93	15,220·18
90	16	3,369·64	10,567·25
91	17	2,392·72	7,197·61
92	18	1,664·16	4,804·89
93	19	1,132·50	3,140·73
94	20	753·311	2,008·226
95	21	489·271	1,254·915
96	22	310·115	765·644
97	23	191·618	455·529
98	24	115·299	263·911
99	25	67·4845	148·6124
100	26	38·3784	81·1279
101	27	21·1822	42·7495
102	28	11·3330	21·5673
103	29	5·8707	10·2343
104	30	2·9408	4·3636
105	31	1·4228	1·4228

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 34 Years older than Female.

Male 73 Years older than Female.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 34 Years older.**	
34	0	862,755	11,838,208
35	1	716,819	10,975,453
36	2	645,496	10,258,634
37	3	597,534	9,613,138
38	4	559,384	9,015,604
39	5	526,974	8,456,220
40	6	498,484	7,929,246
41	7	472,647	7,430,762
42	8	448,626	6,958,115
43	9	426,227	6,509,489
44	10	405,181	6,083,262
45	11	385,268	5,678,081
46	12	366,306	5,292,813
47	13	348,153	4,926,507
48	14	330,695	4,578,354
49	15	313,845	4,247,659
50	16	297,538	3,933,814
51	17	281,728	3,636,276
52	18	266,236	3,354,548
53	19	251,178	3,088,312
54	20	236,558	2,837,134
55	21	222,381	2,600,576
56	22	208,753	2,378,195
57	23	195,659	2,169,442
58	24	183,080	1,973,783
59	25	170,998	1,790,703
60	26	159,395	1,619,705
61	27	148,252	1,460,310
62	28	137,554	1,312,058
63	29	127,286	1,174,504
64	30	117,437	1,047,218
65	31	107,998	929,781
66	32	98,961·4	821,783·0
67	33	90,324·9	722,821·6
68	34	82,087·4	632,496·7
69	35	74,250·2	550,409·3
70	36	66,816·9	476,159·1
71	37	59,792·6	409,342·2
72	38	53,183·0	349,549·6
73	39	46,994·5	296,366·6
74	40	41,232·6	249,372·1
75	41	35,901·6	208,139·5
76	42	31,004·1	172,237·9
77	43	26,539·6	141,233·8
78	44	22,504·4	114,694·2
79	45	18,891·2	92,189·8
80	46	15,688·2	73,298·6
81	47	12,879·7	57,610·4
82	48	10,445·9	44,730·7
83	49	8,363·08	34,284·75
84	50	6,604·34	25,921·67
85	51	5,140·32	19,317·33
86	52	3,939·94	14,177·01
87	53	2,971·39	10,237·07
88	54	2,203·03	7,265·68
89	55	1,601·85	5,062·65
90	56	1,142·05	3,460·80
91	57	797·616	2,318·745
92	58	545·125	1,521·129
93	59	364·188	976·004
94	60	237·571	611·816
95	61	151·144	374·245
96	62	93·6661	223·1010
97	63	56·4702	129·4349
98	64	33·0770	72·9647
99	65	18·7979	39·8877
100	66	10·3502	21·0898
101	67	5·5133	10·7396
102	68	2·8368	5·2263
103	69	1·4078	2·3895
104	70	·6727	·9817
105	71	·3090	·3090

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 73 Years older.**	
73	0	151,300	816,202
74	1	116,321	664,902
75	2	96,239·4	548,580·7
76	3	81,229·2	452,341·3
77	4	68,767·4	371,112·1
78	5	58,071·8	302,344·7
79	6	48,780·4	244,272·9
80	7	40,662·4	195,492·5
81	8	33,570·8	154,830·1
82	9	27,428·8	121,259·3
83	10	22,154·9	93,830·5
84	11	17,672·3	71,675·6
85	12	13,906·6	54,003·3
86	13	10,784·3	40,096·7
87	14	8,233·12	29,312·37
88	15	6,181·30	21,079·25
89	16	4,559·23	14,897·95
90	17	3,300·29	10,338·72
91	18	2,342·17	7,038·43
92	19	1,627·97	4,696·26
93	20	1,107·11	3,068·29
94	21	735·903	1,961·175
95	22	477·857	1,225·272
96	23	302·815	747·415
97	24	187·068	444·600
98	25	112·538	257·532
99	26	65·8553	144·9939
100	27	37·4445	79·1386
101	28	20·6628	41·6941
102	29	11·0530	21·0313
103	30	5·7245	9·9783
104	31	2·8670	4·2538
105	32	1·3868	1·3868

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 35 Years older than Female.

Male 72 Years older than Female.

Male 35 Years older.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
35	0	840,752	11,409,403
36	1	698,346	10,568,651
37	2	628,675	9,870,305
38	3	581.778	9,241,630
39	4	544·447	8,659,852
40	5	512,713	8,115.405
41	6	484,801	7,602,692
42	7	459,477	7,117,891
43	8	435,923	6,658,414
44	9	413,954	6,222,491
45	10	393 305	5,808,537
46	11	373,763	5·415,232
47	12	355,151	5,041,469
48	13	337.331	4,686,318
49	14	320,193	4,348,987
50	15	303,652	4,028,794
51	16	287,648	3,725,142
52	17	271,982	3,437,494
53	18	256,762	3,165,512
54	19	241,983	2,908,750
55	20	227,642	2,666,767
56	21	213,740	2,439,125
57	22	200,376	2,225,385
58	23	187,533	2,025,009
59	24	175,193	1,837,476
60	25	163.338	1,662,283
61	26	151.949	1,498,945
62	27	141,012	1,346,996
63	28	130.511	1,205,984
64	29	120.436	1,075,473
65	30	110,777	955,037
66	31	101,528	844,260
67	32	92,685·7	742,731·5
68	33	84,249·9	650,045·8
69	34	76,222·1	565,795·9
70	35	68,606·1	489,573·8
71	36	61,407·3	420,967·7
72	37	54.631·8	359,560·4
73	38	48,286·3	304,928·6
74	39	42.376·5	256,642·3
75	40	36,907·4	214,265·8
76	41	31,881·4	177,358·4
77	42	27,298·4	145,477·0
78	43	23,154·9	118,178·6
79	44	19,443·4	95,023·7
80	45	16,152·2	75,580·3
81	46	13,265·4	59,428·1
82	47	10,762·7	46,162·7
83	48	8,620·11	35,399·95
84	49	6,810·14	26,779·84
85	50	5,302·82	19,969·70
86	51	4,066·37	14,666·88
87	52	3,068·23	10,600·51
88	53	2,275·99	7,532·28
89	54	1,658·32	5,256·29
90	55	1,183·89	3,597·97
91	56	827·992	2,414·084
92	57	566·723	1,586·092
93	58	379·219	1,019·369
94	59	247·803	640·150
95	60	157·951	392·347
96	61	98·0877	234·3964
97	62	59·2711	136·3087
98	63	34·8051	77·0376
99	64	19·8350	42·2325
100	65	10·9548	22·3975
101	66	5·8551	11·4427
102	67	3·0239	5·5876
103	68	1·5067	2·5637
104	69	·7232	1·0570
105	70	·3338	·3338

Male 72 Years older.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
72	0	166,643	934,613
73	1	128,997	767,970
74	2	107,518	638,973
75	3	91,472·3	531,455·1
76	4	78,102·5	439,982·8
77	5	66,560·5	361,880·3
78	6	56,460·1	295,319·8
79	7	47,557·6	238,859·7
80	8	39,702·1	191,302·1
81	9	32,824·0	151,600·0
82	10	26,847·5	118,776·0
83	11	21,702·2	91,928·5
84	12	17,319·8	70,226·3
85	13	13,632·6	52,906·5
86	14	10,572·2	39,273·9
87	15	8,069·90	28,701·73
88	16	6,056·82	20,631·83
89	17	4,465·40	14,575·01
90	18	3,230·57	10,109·61
91	19	2,291·23	6,879·04
92	20	1,591·47	4,587·81
93	21	1,081·53	2,996·34
94	22	718·735	1,914·813
95	23	466·608	1,196·078
96	24	295·624	729·470
97	25	182·589	433·846
98	26	109·821	251·257
99	27	64·2530	141·4362
100	28	36·5263	77·1832
101	29	20·1522	40·6569
102	30	10·7778	20·5047
103	31	5·5809	9·7269
104	32	2·7945	4·1460
105	33	1·3515	1·3515

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 36 Years older than Female.

Male 71 Years older than Female.

Male 36 Years older.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
36	0	819,085	10,988,192
37	1	680,148	10,169,107
38	2	612,098	9,488,959
39	3	566,243	8,876,861
40	4	529,713	8,310,618
41	5	498,639	7,780,905
42	6	471,291	7,282,266
43	7	446,467	6,810,975
44	8	423,371	6,364,508
45	9	401,821	5,941,137
46	10	381,560	5,539,316
47	11	362,380	5,157,756
48	12	344,111	4,795,376
49	13	326,617	4,451,265
50	14	309,794	4,124,648
51	15	293,559	3,814,854
52	16	277,697	3,521,295
53	17	262,304	3,243,598
54	18	247,363	2,981,294
55	19	232,862	2,733,931
56	20	218,796	2,501,069
57	21	205,162	2,282,273
58	22	192,054	2,077,111
59	23	179,455	1,885,057
60	24	167,345	1,705,602
61	25	155,708	1,538,257
62	26	144,529	1,382,549
63	27	133,792	1,238,020
64	28	123,487	1,104,228
65	29	113,605	980,741
66	30	104,140	867,136
67	31	95,089·2	762,996·3
68	32	86,451·9	667,907·1
69	33	78,230·1	581,455·2
70	34	70,428·2	503,225·1
71	35	63,051·6	432,796·9
72	36	56,107·2	369,745·3
73	37	49,601·6	313,638·1
74	38	43,541·4	264,036·5
75	39	37,931·3	220,495·1
76	40	32,774·5	182,563·8
77	41	28,070·8	149,789·3
78	42	23,816·9	121,718·5
79	43	20,005·4	97,901·6
80	44	16,624·4	77,896·2
81	45	13,657·8	61,271·8
82	46	11,085·0	47,614·0
83	47	8,881·53	36,529·02
84	48	7,019·44	27,647·49
85	49	5,468·06	20,628·05
86	50	4,194·92	15,159·99
87	51	3,166·68	10,965·07
88	52	2,350·17	7,798·39
89	53	1,713·24	5,448·22
90	54	1,225·63	3,734·98
91	55	858·327	2,509·345
92	56	588·305	1,651·018
93	57	394·244	1,062·713
94	58	258·031	668·469
95	59	164·754	410·438
96	60	102·506	245·684
97	61	62·0690	143·1784
98	62	36·5314	81·1094
99	63	20·8713	44·5780
100	64	11·5592	23·7067
101	65	6·1971	12·1475
102	66	3·2114	5·9504
103	67	1·6061	2·7390
104	68	·7740	1·1329
105	69	·3589	·3589

Male 71 Years older.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
71	0	182,385	1,062,941
72	1	142,079	880,556
73	2	119,234	738,477
74	3	102,192	619,243
75	4	87,951·3	517,051·4
76	5	75,595·9	429,100·1
77	6	64,713·2	353,504·2
78	7	55,044·7	288,791·0
79	8	46,434·4	233,746·3
80	9	38,819·0	187,311·9
81	10	32,128·4	148,492·9
82	11	26,298·9	116,364·5
83	12	21,269·2	90,065·6
84	13	16,978·5	68,796·4
85	14	13,364·4	51,817·9
86	15	10,362·6	38,453·5
87	16	7,907·39	28,090·93
88	17	5,932·17	20,183·54
89	18	4,371·06	14,251·37
90	19	3,160·30	9,880·31
91	20	2,239·86	6,720·01
92	21	1,554·69	4,480·15
93	22	1,056·30	2,925·46
94	23	701·816	1,869·159
95	24	455·528	1,167·343
96	25	288·546	711·815
97	26	178·181	423·269
98	27	107·149	245·088
99	28	62·6774	137·9390
100	29	35·6238	75·2616
101	30	19·6504	39·6378
102	31	10·5074	19·9874
103	32	5·4398	9·4800
104	33	2·7234	4·0402
105	34	1·3168	1·3168

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 37 Years older than Female.

Male 70 Years older than Female.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 37 Years older.**	
37	0	797,741	10,574,517
38	1	662,214	9,776,776
39	2	595,753	9,114,562
40	3	550,920	8,518,809
41	4	515,173	7,967,889
42	5	484,744	7,452,716
43	6	457,947	6,967,972
44	7	433,611	6,510,025
45	8	410,962	6,076,414
46	9	389,821	5,665,452
47	10	369,940	5,275,631
48	11	351,115	4,905,691
49	12	333,182	4,554,576
50	13	316,010	4,221,394
51	14	299,497	3,905,384
52	15	283,404	3,605,887
53	16	267,816	3,322,483
54	17	252,702	3,054,667
55	18	238,040	2,801,965
56	19	223,814	2,563,925
57	20	210,015	2,340,111
58	21	196,642	2,130,096
59	22	183,781	1,933,454
60	23	171,415	1,749,673
61	24	159,528	1,578,258
62	25	148,104	1,418,730
63	26	137,129	1,270,626
64	27	126,591	1,133,497
65	28	116,483	1,006,906
66	29	106,799	890,423
67	30	97,536·1	783,624·3
68	31	88,693·8	686,088·2
69	32	80,274·8	597,394·4
70	33	72,283·6	517,119·6
71	34	64,726·1	444,836·0
72	35	57,609·6	380,109·9
73	36	50,941·1	322,500·3
74	37	44,727·5	271,559·2
75	38	38,974·0	226,831·7
76	39	33,683·8	187,857·7
77	40	28,857·2	154,173·9
78	41	24,490·8	125,316·7
79	42	20,577·4	100,825·9
80	43	17,104·9	80,248·5
81	44	14,057·0	63,143·6
82	45	11,412·9	49,086·6
83	46	9,147·47	37,673·70
84	47	7,232·33	28,526·23
85	48	5,636·12	21,293·90
86	49	4,325·64	15,657·78
87	50	3,266·79	11,332·14
88	51	2,425·58	8,065·35
89	52	1,769·07	5,639·77
90	53	1,266·22	3,870·70
91	54	888·587	2,604·476
92	55	609·859	1,715·889
93	56	409·258	1,106·030
94	57	268·254	696·772
95	58	171·554	428·518
96	59	106·921	256·964
97	60	64·8646	150·0429
98	61	38·2559	85·1783
99	62	21·9065	46·9224
100	63	12·1631	25·0159
101	64	6·5390	12·8528
102	65	3·3989	6·3138
103	66	1·7057	2·9149
104	67	·8251	1·2092
105	68	·3841	·3841

Male 70 Years older.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
70	0	198,452	1,201,198
71	1	155,500	1,002,746
72	2	131,326	847,246
73	3	113,328	715,920
74	4	98,258·4	602,592·3
75	5	85,128·7	504,333·9
76	6	73,497·9	419,205·2
77	7	63,091·0	345,707·3
78	8	53,744·8	282,616·3
79	9	45,401·6	228,871·5
80	10	37,996·4	183,469·9
81	11	31,471·9	145,473·5
82	12	25,774·3	114,001·6
83	13	20,850·2	88,227·3
84	14	16,644·6	67,377·1
85	15	13,099·5	50,732·5
86	16	10,153·9	37,633·0
87	17	7,744·65	27,479·10
88	18	5,806·84	19,734·45
89	19	4,275·99	13,927·61
90	20	3,089·45	9,651·62
91	21	2,188·10	6,562·17
92	22	1,518·42	4,374·07
93	23	1,031·43	2,855·65
94	24	685·151	1,824·220
95	25	444·620	1,139·069
96	26	281·580	694·449
97	27	173·846	412·869
98	28	104·521	239·023
99	29	61·1286	134·5022
100	30	34·7368	73·3736
101	31	19·1575	38·6368
102	32	10·2418	19·4793
103	33	5·3013	9·2375
104	34	2·6535	3·9362
105	35	1·2827	1·2827

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 38 Years older than Female.

Male 69 Years older than Female.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Male 38 Years older.**	
38	0	776,706	10,168,306
39	1	644,531	9,391,600
40	2	579,631	8,747,069
41	3	535,797	8,167,438
42	4	500,817	7,631,641
43	5	471,019	7,130,824
44	6	444,761	6,659,805
45	7	420,902	6,215,044
46	8	398,689	5,794,142
47	9	377,949	5,395,453
48	10	358,440	5,017,504
49	11	339,964	4,659,064
50	12	322,361	4,319,100
51	13	305,506	3,996,739
52	14	289,136	3,691,233
53	15	273,320	3,402,097
54	16	258,012	3,128,777
55	17	243,177	2,870,765
56	18	228,790	2,627,588
57	19	214,832	2,398,798
58	20	201,293	2,183,966
59	21	188,171	1,982,673
60	22	175,548	1,794,502
61	23	163,408	1,618,954
62	24	151,737	1,455,546
63	25	140,521	1,303,809
64	26	129,748	1,163,288
65	27	119,412	1,033,540
66	28	109,505	914,128
67	29	100,027	804,623
68	30	90,976·1	704,595·5
69	31	82,356·5	613,619·4
70	32	74,172·8	531,262·9
71	33	66,431·3	457,090·1
72	34	59,139·6	390,658·8
73	35	52,305·2	331,519·2
74	36	45,935·3	279,214·0
75	37	40,035·7	233,278·7
76	38	34,609·6	193,243·0
77	39	29,657·8	158,633·4
78	40	25,176·9	128,975·6
79	41	21,159·6	103,798·7
80	42	17,593·9	82,639·1
81	43	14,463·3	65,045·2
82	44	11,746·5	50,581·9
83	45	9,418·04	38,835·42
84	46	7,448·89	29,417·38
85	47	5,807·05	21,968·49
86	48	4,458·58	16,161·44
87	49	3,368·59	11,702·86
88	50	2,502·26	8,334·27
89	51	1,825·84	5,832·01
90	52	1,307·49	4,006·17
91	53	918·015	2,698·684
92	54	631·359	1,780·669
93	55	424·252	1,149·310
94	56	278·471	725·058
95	57	178·351	446·587
96	58	111·334	268·236
97	59	67·6584	156·9024
98	60	39·9789	89·2440
99	61	22·9406	49·2651
100	62	12·7664	26·3245
101	63	6·8806	13·5581
102	64	3·5865	6·6775
103	65	1·8053	3·0910
104	66	·8762	1·2857
105	67	·4095	·4095

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Male 69 Years older.**	
69	0	214,778	1,349,344
70	1	169,199	1,134,566
71	2	143,732	965,367
72	3	124,821	821,635
73	4	108,966	696,814
74	5	95,104·9	587,848·3
75	6	82,766·1	492,743·4
76	7	71,655·4	409,977·3
77	8	61,601·0	338,321·9
78	9	52,549·3	276,720·9
79	10	44,439·5	224,171·6
80	11	37,219·9	179,732·1
81	12	30,844·0	142,512·2
82	13	25,266·4	111,668·2
83	14	20,440·1	86,401·8
84	15	16,314·6	65,961·7
85	16	12,835·7	49,647·1
86	17	9,944·97	36,811·40
87	18	7,581·03	26,866·43
88	19	5,680·54	19,285·40
89	20	4,180·12	13,604·86
90	21	3,018·06	9,424·74
91	22	2,137·05	6,406·68
92	23	1,482·68	4,269·63
93	24	1,006·94	2,786·95
94	25	668·745	1,780·009
95	26	433·887	1,111·264
96	27	274·729	677·377
97	28	169·583	402·648
98	29	101·939	233·065
99	30	59·6067	131·1255
100	31	33·8654	71·5188
101	32	18·6732	37·6534
102	33	9·9809	18·9802
103	34	5·1652	8·9993
104	35	2·5848	3·8341
105	36	1·2493	1·2493

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 39 Years older than Female.

Male 68 Years older than Female.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
		Male 39 Years older.	
39	0	755,966	9,769,511
40	1	627,089	9,013,545
41	2	563,721	8,386,456
42	3	520,867	7,822,735
43	4	486,637	7,301,868
44	5	457,457	6,815,231
45	6	431,725	6,357,774
46	7	408,332	5,926,049
47	8	386,547	5,517,717
48	9	366,201	5,131,170
49	10	347,056	4,764,969
50	11	328,923	4,417,913
51	12	311,646	4,088,990
52	13	294,938	3,777,344
53	14	278,848	3,482,406
54	15	263,315	3,203,558
55	16	248,287	2,940,243
56	17	233,728	2,691,956
57	18	219,608	2,458,228
58	19	205,910	2,238,620
59	20	192,622	2,032,710
60	21	179,741	1,840,088
61	22	167,348	1,660,347
62	23	155,428	1,492,999
63	24	143,968	1,337,571
64	25	132,958	1,193,603
65	26	122,390	1,060,645
66	27	112,258	938,255
67	28	102,561	825,997
68	29	93,299·0	723,436·0
69	30	84,475·7	630,137·0
70	31	76,096·3	545,661·3
71	32	68,167·6	469,565·0
72	33	60,697·6	401,397·4
73	34	53,694·3	340,699·8
74	35	47,165·4	287,005·5
75	36	41,116·8	239,840·1
76	37	35,552·5	198,723·3
77	38	30,473·0	163,170·8
78	39	25,875·4	132,697·8
79	40	21,752·4	106,822·4
80	41	18,091·8	85,070·0
81	42	14,876·8	66,978·2
82	43	12,086·0	52,101·4
83	44	9,693·35	40,015·39
84	45	7,669·21	30,322·04
85	46	5,980·93	22,652·83
86	47	4,593·80	16,671·90
87	48	3,472·12	12,078·10
88	49	2,580·24	8,605·98
89	50	1,883·56	6,025·74
90	51	1,349·45	4,142·18
91	52	947·933	2,792·729
92	53	652·269	1,844·796
93	54	439·209	1,192·527
94	55	288·673	753·318
95	56	185·143	464·645
96	57	115·745	279·502
97	58	70·4509	163·7574
98	59	41·7009	93·3065
99	60	23·9738	51·6056
100	61	13·3690	27·6318
101	62	7·2219	14·2628
102	63	3·7738	7·0409
103	64	1·9049	3·2671
104	65	·9274	1·3622
105	66	·4348	·4348
		Male 68 Years older.	
68	0	231,305	1,507,296
69	1	183,118	1,275,991
70	2	156,394	1,092,873
71	3	136,612	936,479
72	4	120,016	799,867
73	5	105,469	679,851
74	6	92,465·5	574,382·2
75	7	80,691·3	481,916·7
76	8	69,963·2	401,225·4
77	9	60,230·8	331,262·2
78	10	51,435·7	271,031·4
79	11	43,531·3	219,595·7
80	12	36,477·4	176,064·4
81	13	30,236·3	139,587·0
82	14	24,769·4	109,350·7
83	15	20,034·8	84,581·3
84	16	15,986·1	64,546·5
85	17	12,571·5	48,560·4
86	18	9,734·86	35,988·93
87	19	7,416·14	26,254·07
88	20	5,553·19	18,837·93
89	21	4,083·52	13,284·74
90	22	2,947·65	9,201·22
91	23	2,086·75	6,253·57
92	24	1,447·47	4,166·82
93	25	982·830	2,719·354
94	26	652·601	1,736·524
95	27	423·330	1,083·923
96	28	267·992	660·593
97	29	165·392	392·601
98	30	99·4006	227·2091
99	31	58·1113	127·8085
100	32	33·0094	69·6972
101	33	18·1976	36·6878
102	34	9·7248	18·4902
103	35	5·0316	8·7654
104	36	2·5174	3·7338
105	37	1·2164	1·2164

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 40 Years older than Female.

Male 67 Years older than Female.

Ages *x*	Ages *y*	$D_{x,\,y}$	$N_{x,\,y}$
		Male 40 Years older.	
40	0	735,508	9,378,076
41	1	609,876	8,642,568
42	2	548,012	8,032,692
43	3	506,119	7,484,680
44	4	472,625	6,978,561
45	5	444,048	6,505,936
46	6	418,832	6,061,888
47	7	395,897	5,643,056
48	8	374,531	5,247,159
49	9	354,570	4,872,628
50	10	335,785	4,518,058
51	11	317,990	4,182,273
52	12	300,865	3,864,283
53	13	284,443	3,563,418
54	14	268,640	3,278,975
55	15	253,390	3,010,335
56	16	238,639	2,756,945
57	17	224,348	2,518,306
58	18	210,488	2,293,958
59	19	197,039	2,083,470
60	20	183,993	1,886,431
61	21	171,345	1,702,438
62	22	159,175	1,531,093
63	23	147,470	1,371,918
64	24	136,220	1,224,448
65	25	125,417	1,088,228
66	26	115,057	962,811
67	27	105,139	847,754
68	28	95,662·8	742,614·9
69	29	86,632·7	646,952·1
70	30	78,054·4	560,319·4
71	31	69,935·3	482,265·0
72	32	62,284·0	412,329·7
73	33	55,108·9	350,045·7
74	34	48,418·0	294,936·8
75	35	42,217·9	246,518·8
76	36	36,512·6	204,300·9
77	37	31,303·1	167,788·3
78	38	26,586·7	136,485·2
79	39	22,355·9	109,898·5
80	40	18,598·6	87,542·6
81	41	15,297·8	68,944·0
82	42	12,431·6	53,646·2
83	43	9,973·52	41,214·60
84	44	7,893·40	31,241·08
85	45	6,157·83	23,347·68
86	46	4,731·35	17,189·85
87	47	3,577·42	12,458·50
88	48	2,659·54	8,881·08
89	49	1,942·26	6,221·54
90	50	1,392·11	4,279·28
91	51	978·352	2,887·172
92	52	673·527	1,908·820
93	53	453·755	1,235·293
94	54	298·850	781·538
95	55	191·926	482·688
96	56	120·153	290·762
97	57	73·2422	170·6087
98	58	43·4220	97·3665
99	59	25·0064	53·9445
100	60	13·9711	28·9381
101	61	7·5628	14·9670
102	62	3·9610	7·4042
103	63	2·0044	3·4432
104	64	·9786	1·4388
105	65	·4602	·4602
		Male 67 Years older.	
67	0	247,984	1,674,943
68	1	197,209	1,426,959
69	2	169,260	1,229,750
70	3	148,647	1,060,490
71	4	131,354	911,843
72	5	116,165	780,489
73	6	102,542	664,324
74	7	90,147·5	561,782·3
75	8	78,785·6	471,634·8
76	9	68,407·0	392,849·2
77	10	58,954·4	324,442·2
78	11	50,384·6	265,487·8
79	12	42,662·9	215,103·2
80	13	35,758·7	172,440·3
81	14	29,641·6	136,681·6
82	15	24,278·4	107,040·0
83	16	19,631·4	82,761·6
84	17	15,657·0	63,130·2
85	18	12,305·9	47,473·2
86	19	9,523·14	35,167·29
87	20	7,249·88	25,644·15
88	21	5,424·86	18,394·27
89	22	3,988·26	12,969·41
90	23	2,878·26	8,981·15
91	24	2,037·20	6,102·89
92	25	1,412·81	4,065·69
93	26	959·104	2,652·877
94	27	636·722	1,693·773
95	28	412·949	1,057·051
96	29	261·370	644·102
97	30	161·274	382·732
98	31	96·9070	221·4576
99	32	56·6425	124·5506
100	33	32·1686	67·9081
101	34	17·7305	35·7395
102	35	9·4732	18·0090
103	36	4·9004	8·5358
104	37	2·4512	3·6354
105	38	1·1842	1·1842

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 41 Years older than Female.

Male 66 Years older than Female.

Male 41 Years older.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
41	0	715,319	8,993,977
42	1	592,881	8,278,658
43	2	532,495	7,685,777
44	3	491,546	7,153,282
45	4	458,772	6,661,736
46	5	430,788	6,202,964
47	6	406,077	5,772,176
48	7	383,590	5,366,099
49	8	362,637	4,982,509
50	9	343,055	4,619,872
51	10	324,624	4,276,817
52	11	306,990	3,952,193
53	12	290,160	3,645,203
54	13	274,031	3,355,043
55	14	258,515	3,081,012
56	15	243,543	2,822,497
57	16	229,062	2,578,954
58	17	215,031	2,349,892
59	18	201,420	2,134,861
60	19	188,212	1,933,441
61	20	175,398	1,745,229
62	21	162,977	1,569,831
63	22	151,025	1,406,854
64	23	139,533	1,255,829
65	24	128,494	1,116,296
66	25	117,904	987,802
67	26	107,761	869,898
68	27	98,067·6	762,136·8
69	28	88,827·6	664,069·2
70	29	80,047·4	575,241·6
71	30	71,734·9	495,194·2
72	31	63,899·2	423,459·3
73	32	56,549·2	359,560·1
74	33	49,693·5	303,010·9
75	34	43,339·1	253,317·4
76	35	37,490·3	209,978·3
77	36	32,148·5	172,488·0
78	37	27,310·9	140,339·5
79	38	22,970·4	113,028·6
80	39	19,114·6	90,058·2
81	40	15,726·3	70,943·6
82	41	12,783·3	55,217·3
83	42	10,258·7	42,434·0
84	43	8,121·55	32,175·28
85	44	6,337·84	24,053·73
86	45	4,871·30	17,715·89
87	46	3,684·54	12,844·59
88	47	2,740·20	9,160·05
89	48	2,001·95	6,419·85
90	49	1,435·49	4,417·90
91	50	1,009·28	2,982·41
92	51	695·139	1,973·133
93	52	468·543	1,277·994
94	53	308·747	809·451
95	54	198·693	500·704
96	55	124·555	302·011
97	56	76·0315	177·4559
98	57	45·1424	101·4244
99	58	26·0385	56·2820
100	59	14·5729	30·2435
101	60	7·9034	15·6706
102	61	4·1480	7·7672
103	62	2·1039	3·6192
104	63	1·0297	1·5153
105	64	·4856	·4856

Male 66 Years older.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
66	0	264,775	1,852,141
67	1	211,429	1,587,366
68	2	182,285	1,375,937
69	3	160,876	1,193,652
60	4	142,925	1,032,776
71	5	127,138	889,851
72	6	112,941	762,713
73	7	99,971·3	649,771·7
74	8	88,018·6	549,800·4
75	9	77,033·2	461,781·8
76	10	66,957·3	384,748·6
77	11	57,749·6	317,791·3
78	12	49,379·5	260,041·7
79	13	41,822·3	210,662·2
80	14	35,055·3	168,839·9
81	15	29,053·9	133,784·6
82	16	23,789·5	104,730·7
83	17	19,227·4	80,941·2
84	18	15,326·3	61,713·8
85	19	12,038·3	46,387·5
86	20	9,309·63	34,349·21
87	21	7,082·34	25,039·58
88	22	5,298·30	17,957·24
89	23	3,894·38	12,658·94
90	24	2,809·92	8,764·56
91	25	1,988·42	5,954·64
92	26	1,378·70	3,966·22
93	27	935·767	2,587·519
94	28	621·108	1,651·752
95	29	402·745	1,030·644
96	30	254·862	627·899
97	31	157·229	373·037
98	32	94·4575	215·8082
99	33	55·1997	121·3507
100	34	31·3429	66·1510
101	35	17·2718	34·8081
102	36	9·2261	17·5363
103	37	4·7715	8·3102
104	38	2·3862	3·5387
105	39	1·1525	1·1525

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 42 Years older than Female.

Male 65 Years older than Female.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Male 42 Years older.**	
42	0	695,386	8,617,176
43	1	576,094	7,921,790
44	2	517,163	7,345,696
45	3	477,138	6,828,533
46	4	445,071	6,351,395
47	5	417,668	5,906,324
48	6	393,454	5,488,656
49	7	371,408	5,095,202
50	8	350,859	4,723,794
51	9	331,652	4,372,935
52	10	313,394	4,041,283
53	11	296,066	3,727,889
54	12	279,538	3,431,823
55	13	263,702	3,152,285
56	14	248,469	2,888,583
57	15	233,770	2,640,114
58	16	219,549	2,406,344
59	17	205,768	2,186,795
60	18	192,397	1,981,027
61	19	179,421	1,788,630
62	20	166,832	1,609,209
63	21	154,632	1,442,377
64	22	142,897	1,287,745
65	23	131,619	1,144,848
66	24	120,796	1,013,229
67	25	110,427	892,433
68	26	100,513	782,006
69	27	91,060·5	681,493·0
70	28	82,075·5	590,432·5
71	29	73,566·6	508,357·0
72	30	65,543·4	434,790·4
73	31	58,015·7	369,247·0
74	32	50,992·4	311,231·3
75	33	44,480·8	260,238·9
76	34	38,485·9	215,758·1
77	35	33,009·3	177,272·2
78	36	28,048·5	144,262·9
79	37	23,596·1	116,214·4
80	38	19,640·0	92,618·3
81	39	16,162·6	72,978·3
82	40	13,141·4	56,815·7
83	41	10,549·0	43,674·3
84	42	8,353·76	33,125·27
85	43	6,521·03	24,771·51
86	44	5,013·70	18,250·48
87	45	3,793·52	13,236·78
88	46	2,822·25	9,443·26
89	47	2,062·66	6,621·01
90	48	1,479·60	4,558·35
91	49	1,040·73	3,078·75
92	50	717·115	2,038·019
93	51	483·578	1,320·904
94	52	318·810	837·326
95	53	205·273	518·516
96	54	128·946	313·243
97	55	78·8170	184·2967
98	56	46·8616	105·4797
99	57	27·0701	58·6181
100	58	15·1744	31·5480
101	59	8·2438	16·3736
102	60	4·3348	8·1298
103	61	2·2032	3·7950
104	62	1·0808	1·5918
105	63	·5110	·5110

Male 65 Years older.

x	y	$D_{x, y}$	$N_{x, y}$
65	0	281,648	2,038,732
66	1	225,745	1,757,084
67	2	195,428	1,531,339
68	3	173,255	1,335,911
69	4	154,683	1,162,656
70	5	138,338	1,007,973
71	6	123,610	869,635
72	7	110,110	746,025
73	8	97,610·3	635,914·6
74	9	86,060·8	538,304·3
75	10	75,400·7	452,243·5
76	11	65,589·0	376,842·8
77	12	56,597·6	311,253·8
78	13	48,406·5	254,656·2
79	14	40,999·6	206,249·7
80	15	34,360·3	165,250·1
81	16	28,468·9	130,889·8
82	17	23,299·9	102,420·9
83	18	18,821·1	79,121·0
84	19	14,992·9	60,299·9
85	20	11,768·4	45,307·0
86	21	9,094·49	33,538·57
87	22	6,917·12	24,444·08
88	23	5,173·58	17,526·96
89	24	3,801·90	12,353·38
90	25	2,742·63	8,551·48
91	26	1,940·41	5,808·85
92	27	1,345·16	3,868·44
93	28	912·821	2,523·283
94	29	605·761	1,610·462
95	30	392·718	1,004·701
96	31	248·469	611·983
97	32	153·254	363·514
98	33	92·0516	210·2602
99	34	53·7829	118·2086
100	35	30·5320	64·4257
101	36	16·8214	33·8937
102	37	8·9835	17·0723
103	38	4·6450	8·0888
104	39	2·3224	3·4438
105	40	1·1214	1·1214

JOINT LIVES :—MALE AND FEMALE LIFE.

Male 43 Years older than Female.

Male 64 Years older than Female.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 43 Years older.**	
43	0	675,697	8,247,663
44	1	559,506	7,571,966
45	2	502,004	7,012,460
46	3	462,889	6,510,456
47	4	431,517	6,047,567
48	5	404,685	5,616,050
49	6	380,958	5,211,365
50	7	359,346	4,830,407
51	8	339,197	4,471,061
52	9	320,179	4,131,864
53	10	302,243	3,811,685
54	11	285,228	3,509,442
55	12	269,002	3,224,214
56	13	253,455	2,955,212
57	14	238,498	2,701,757
58	15	224,061	2,463,259
59	16	210,091	2,239,198
60	17	196,550	2,029,107
61	18	183,410	1,832,557
62	19	170,658	1,649,147
63	20	158,290	1,478,489
64	21	146,310	1,320,199
65	22	134,792	1,173,889
66	23	123,734	1,039,097
67	24	113,136	915,363
68	25	103,000	802,227
69	26	93,331·5	699,227·0
70	27	84,138·7	605,895·5
71	28	75,430·5	521,756·8
72	29	67,217·0	446,326·3
73	30	59,508·5	379,109·3
74	31	52,314·7	319,600·8
75	32	45,643·4	267,286·1
76	33	39,499·8	221,642·7
77	34	33,886·0	182,142·9
78	35	28,799·5	148,256·9
79	36	24,233·3	119,457·4
80	37	20,175·0	95,224·1
81	38	16,606·9	75,049·1
82	39	13,506·0	58,442·2
83	40	10,844·5	44,936·2
84	41	8,590·13	34,091·65
85	42	6,707·47	25,501·52
86	43	5,158·61	18,794·05
87	44	3,904·42	13,635·44
88	45	2,905·72	9,731·02
89	46	2,124·43	6,825·30
90	47	1,524·48	4,700·87
91	48	1,072·72	3,176·39
92	49	739·461	2,103·672
93	50	498·865	1,364·211
94	51	329·040	865·346
95	52	211·963	536·306
96	53	133·216	324·343
97	54	81·5957	191·1270
98	55	48·5785	109·5313
99	56	28·1011	60·9528
100	57	15·7756	32·8517
101	58	8·5841	17·0761
102	59	4·5215	8·4920
103	60	2·3024	3·9705
104	61	1·1318	1·6681
105	62	·5363	·5363

Male 64 Years older.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
64	0	298,582	2,234,550
65	1	240,131	1,935,968
66	2	208,661	1,695,837
67	3	185,748	1,487,176
68	4	166,586	1,301,428
69	5	149,719	1,134,842
70	6	134,499	985,123
71	7	120,511	850,624
72	8	107,509	730,113
73	9	95,439·2	622,604·3
74	10	84,237·0	527,165·1
75	11	73,859·8	442,928·1
76	12	64,280·5	369,068·3
77	13	55,482·4	304,787·8
78	14	47,454·4	249,305·4
79	15	40,186·8	201,851·0
80	16	33,668·4	161,664·2
81	17	27,883·0	127,995·8
82	18	22,807·6	100,112·8
83	19	18,411·8	77,305·2
84	20	14,656·8	58,893·4
85	21	11,496·4	44,236·6
86	22	8,882·33	32,740·16
87	23	6,754·29	23,857·83
88	24	5,050·73	17,103·54
89	25	3,710·86	12,052·81
90	26	2,676·42	8,341·95
91	27	1,893·20	5,665·53
92	28	1,312·17	3,772·33
93	29	890·265	2,460·161
94	30	590·679	1,569·896
95	31	382·866	979·217
96	32	242·188	596·351
97	33	149·351	354·163
98	34	89·6888	204·8117
99	35	52·3915	115·1229
100	36	29·7358	62·7314
101	37	16·3791	32·9956
102	38	8·7453	16·6165
103	39	4·5207	7·8712
104	40	2·2597	3·3505
105	41	1·0908	1·0908

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 44 Years older than Female.

Male 63 Years older than Female.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 44 Years older.**	
44	0	656,240	7,885,426
45	1	543,107	7,229,186
46	2	487,013	6,686,079
47	3	448,792	6,199,066
48	4	418,103	5,750,274
49	5	391,832	5,332,171
50	6	368,586	4,940,339
51	7	347,401	4,571,753
52	8	327,463	4,224,352
53	9	308,787	3,896,889
54	10	291,179	3,588,102
55	11	274,477	3,296,923
56	12	258,549	3,022,446
57	13	243,283	2,763,897
58	14	228,593	2,520,614
59	15	214,409	2,292,021
60	16	200,680	2,077,612
61	17	187,369	1,876,932
62	18	174,453	1,689,563
63	19	161,921	1,515,110
64	20	149,771	1,353,189
65	21	138,012	1,203,418
66	22	126,717	1,065,406
67	23	115,888	938,689
68	24	105,527	822,801
69	25	95,640·3	717,273·9
70	26	86,237·0	621,633·6
71	27	77,326·6	535,396·6
72	28	68,920·0	458,070·0
73	29	61,028·0	389,150·0
74	30	53,660·9	328,122·0
75	31	46,827·0	274,461·1
76	32	40,532·2	227,634·1
77	33	34,778·7	187,101·9
78	34	29,564·4	152,323·2
79	35	24,882·2	122,758·8
80	36	20,719·8	97,876·6
81	37	17,059·3	77,156·8
82	38	13,877·3	60,097·5
83	39	11,145·3	46,220·2
84	40	8,830·77	35,074·94
85	41	6,897·27	26,244·17
86	42	5,306·10	19,346·90
87	43	4,017·27	14,040·80
88	44	2,990·66	10,023·53
89	45	2,187·26	7,032·87
90	46	1,570·12	4,845·61
91	47	1,105·25	3,275·49
92	48	762·188	2,170·239
93	49	514·411	1,408·051
94	50	339·442	893·640
95	51	218·765	554·198
96	52	137·558	335·433
97	53	84·2980	197·8746
98	54	50·2911	113·5766
99	55	29·1306	63·2855
100	56	16·3764	34·1549
101	57	8·9242	17·7785
102	58	4·7082	8·8543
103	59	2·4016	4·1461
104	60	1·1828	1·7445
105	61	·5617	·5617

x	y	**Male 63 Years older.**	
63	0	315,566	2,439,426
64	1	254,569	2,123,860
65	2	221,958	1,869,291
66	3	198,325	1,647,333
67	4	178,598	1,449,008
68	5	161,240	1,270,410
69	6	145,564	1,109,170
70	7	131,127	963,606
71	8	117,665	832,479
72	9	105,118	714,814
73	10	93,416·7	609,695·5
74	11	82,515·5	516,278·8
75	12	72,386·4	433,763·3
76	13	63,014·1	361,376·9
77	14	54,391·1	298,362·8
78	15	46,513·6	243,971·7
79	16	39,377·6	197,458·1
80	17	32,975·5	158,080·5
81	18	27,293·9	125,105·0
82	19	22,311·6	97,811·1
83	20	17,999·0	75,499·5
84	21	14,318·1	57,500·5
85	22	11,228·2	43,182·4
86	23	8,673·24	31,954·19
87	24	6,593·90	23,280·95
88	25	4,929·79	16,687·05
89	26	3,621·28	11,757·26
90	27	2,611·30	8,135·98
91	28	1,846·78	5,524·68
92	29	1,279·75	3,677·90
93	30	868·099	2,398·145
94	31	575·861	1,530·046
95	32	373·188	954·185
96	33	236·019	580·997
97	34	145·517	344·978
98	35	87·3685	199·4611
99	36	51·0251	112·0926
100	37	28·9539	61·0675
101	38	15·9447	32·1136
102	39	8·5113	16·1689
103	40	4·3987	7·6576
104	41	2·1981	3·2589
105	42	1·0608	1·0608

JOINT LIVES :—MALE AND FEMALE LIFE.

Male 45 Years older than Female.

Male 62 Years older than Female.

Ages x	Ages y	$D_{x, y}$	$N_{x, y}$
		Male 45 Years older.	
45	0	637,006	7,530,459
46	1	526,888	6,893,453
47	2	472,181	6,366,565
48	3	434,841	5,894,384
49	4	404,824	5,459,543
50	5	379,107	5,054,719
51	6	356,334	4,675,612
52	7	335,384	4,319,278
53	8	315,811	3,983,894
54	9	297,483	3,668,083
55	10	280,204	3,370,600
56	11	263,812	3,090,396
57	12	248,173	2,826,584
58	13	233,180	2,578,411
59	14	218,746	2,345,231
60	15	204,804	2,126,485
61	16	191,306	1,921,681
62	17	178,218	1,730,375
63	18	165,520	1,552,157
64	19	153,206	1,386,637
65	20	141,277	1,233,431
66	21	129,744	1,092,154
67	22	118,681	962,410
68	23	108,093	843,729
69	24	97,986·6	735,636·4
70	25	88,370·3	637,649·8
71	26	79,255·1	549,279·5
72	27	70,652·5	470,024·4
73	28	62,574·2	399,371·9
74	29	55,031·0	336,797·7
75	30	48,032·0	281,766·7
76	31	41,583·3	233,734·7
77	32	35,687·7	192,151·4
78	33	30,343·2	156,463·7
79	34	25,543·1	126,120·5
80	35	21,274·7	100,577·4
81	36	17,520·0	79,302·7
82	37	14,255·3	61,782·7
83	38	11,451·7	47,527·4
84	39	9,075·77	36,075·65
85	40	7,090·48	26,999·88
86	41	5,456·24	19,909·40
87	42	4,132·13	14,453·16
88	43	3,077·11	10,321·03
89	44	2,251·20	7,243·92
90	45	1,616·57	4,992·72
91	46	1,138·34	3,376·15
92	47	785·303	2,237·810
93	48	530·220	1,452·507
94	49	350·019	922·287
95	50	225·680	572·268
96	51	141·972	346·588
97	52	87·0453	204·6160
98	53	51·9566	117·5707
99	54	30·1576	65·6141
100	55	16·9764	35·4565
101	56	9·2640	18·4801
102	57	4·8947	9·2161
103	58	2·5007	4·3214
104	59	1·2337	1·8207
105	60	·5870	·5870
		Male 62 Years older.	
62	0	332,595	2,653,187
63	1	269,049	2,320,592
64	2	235,303	2,051,543
65	3	210,963	1,816,240
66	4	190,691	1,605,277
67	5	172,866	1,414,586
68	6	156,765	1,241,720
69	7	141,915	1,084,955
70	8	128,031	943,040
71	9	115,048	815,009
72	10	102,890	699,961
73	11	91,507·6	597,070·8
74	12	80,869·4	505,563·2
75	13	70,960·2	424,693·8
76	14	61,774·5	353,733·6
77	15	53,312·8	291,959·1
78	16	45,576·9	238,646·3
79	17	38,567·2	193,069·4
80	18	32,278·8	154,502·2
81	19	26,700·2	122,223·4
82	20	21,811·3	95,523·2
83	21	17,583·1	73,711·9
84	22	13,984·1	56,128·8
85	23	10,963·9	42,144·7
86	24	8,467·29	31,180·78
87	25	6,436·01	22,713·49
88	26	4,810·78	16,277·48
89	27	3,533·17	11,466·70
90	28	2,547·27	7,933·53
91	29	1,801·14	5,386·26
92	30	1,247·89	3,585·12
93	31	846·322	2,337·231
94	32	561·305	1,490·909
95	33	363·683	929·604
96	34	229·961	565·921
97	35	141·753	335·960
98	36	85·0900	194·2069
99	37	49·6834	109·1169
100	38	28·1860	59·4335
101	39	15·5182	31·2475
102	40	8·2816	15·7293
103	41	4·2788	7·4477
104	42	2·1376	3·1689
105	43	1·0313	1·0313

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 46 Years older than Female.
Male 61 Years older than Female.

Male 46 Years older.

Ages *x*	Ages *y*	$D_{x,y}$	$N_{x,y}$
46	0	617,983	7,182,771
47	1	510,842	6,564,788
48	2	457,503	6,053,946
49	3	421,031	5,596,443
50	4	391,677	5,175,412
51	5	366,506	4,783,735
52	6	344,007	4,417,229
53	7	323,450	4,073,222
54	8	304,250	3,749,772
55	9	286,270	3,445,522
56	10	269,315	3,159,252
57	11	253,225	2,889,937
58	12	237,866	2,636,712
59	13	223,135	2,398,846
60	14	208,946	2,175,711
61	15	195,237	1,966,765
62	16	181,963	1,771,528
63	17	169,093	1,589,565
64	18	156,612	1,420,472
65	19	144,517	1,263,860
66	20	132,813	1,119,343
67	21	121,516	986,530
68	22	110,699	865,014
69	23	100,370	754,315
70	24	90,538·2	653,945·1
71	25	81,215·7	563,406·9
72	26	72,414·5	482,191·2
73	27	64,147·2	409,776·7
74	28	56,425·3	345,629·5
75	29	49,258·4	289,204·2
76	30	42,653·3	239,945·8
77	31	36,613·2	197,292·5
78	32	31,136·3	160,679·3
79	33	26,216·0	129,543·0
80	34	21,839·7	103,327·0
81	35	17,989·1	81,487·3
82	36	14,640·3	63,498·2
83	37	11,763·7	48,857·9
84	38	9,325·24	37,094·24
85	39	7,287·20	27,769·00
86	40	5,609·09	20,481·80
87	41	4,249·05	14,872·71
88	42	3,165·09	10,623·66
89	43	2,316·27	7,458·57
90	44	1,663·82	5,142·30
91	45	1,172·01	3,478·48
92	46	808·817	2,306·469
93	47	546·301	1,497·652
94	48	360·777	951·351
95	49	232·713	590·574
96	50	146·460	357·861
97	51	89·8385	211·4007
98	52	53·6499	121·5622
99	53	31·1563	67·9123
100	54	17·5748	36·7560
101	55	9·6034	19·1812
102	56	5·0811	9·5778
103	57	2·5998	4·4967
104	58	1·2847	1·8969
105	59	·6122	·6122

Male 61 Years older.

Ages *x*	Ages *y*	$D_{x,y}$	$N_{x,y}$
61	0	349,672	2,875,678
62	1	283,568	2,526,006
63	2	248,688	2,242,438
64	3	223,648	1,993,750
65	4	202,843	1,770,102
66	5	184,571	1,567,259
67	6	168,069	1,382,688
68	7	152,835	1,214,619
69	8	138,563	1,061,784
70	9	125,183	923,221
71	10	112,610	798,038
72	11	100,788	685,428
73	12	89,682·1	584,640·0
74	13	79,276·1	494,957·9
75	14	69,564·4	415,681·8
76	15	60,549·9	346,117·4
77	16	52,239·2	285,567·5
78	17	44,638·9	233,328·3
79	18	37,752·3	188,689·4
80	19	31,576·8	150,937·1
81	20	26,101·6	119,360·3
82	21	21,307·3	93,258·7
83	22	17,172·9	71,951·4
84	23	13,654·9	54,778·5
85	24	10,703·5	41,123·6
86	25	8,264·54	30,420·05
87	26	6,280·64	22,155·51
88	27	4,693·73	15,874·87
89	28	3,446·53	11,181·14
90	29	2,484·33	7,734·61
91	30	1,756·30	5,250·28
92	31	1,216·58	3,493·98
93	32	824·929	2,277·400
94	33	547·008	1,452·471
95	34	354·348	905·463
96	35	224·012	551·115
97	36	138·056	327·103
98	37	82·8525	189·0471
99	38	48·3659	106·1946
100	39	27·4320	57·8287
101	40	15·0992	30·3967
102	41	8·0559	15·2975
103	42	4·1611	7·2416
104	43	2·0782	3·0805
105	44	1·0023	1·0023

JOINT LIVES:—Male and Female Life.

Male 47 Years older than Female.

Male 60 Years older than Female.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
		Male 47 Years older.	
47	0	599,162	6,842,379
48	1	494,962	6,243,217
49	2	442,973	5,748,255
50	3	407,358	5,305,282
51	4	378,658	4,897,924
52	5	353,827	4,519,266
53	6	331,767	4,165,439
54	7	311,610	3,833,672
55	8	292,783	3,522,062
56	9	275,146	3,229,279
57	10	258,507	2,954,133
58	11	242,708	2,695,626
59	12	227,619	2,452,918
60	13	213,139	2,225,299
61	14	199,186	2,012,160
62	15	185,702	1,812,974
63	16	172,646	1,627,272
64	17	159,992	1,454,626
65	18	147,730	1,294,634
66	19	135,859	1,146,904
67	20	124,391	1,011,045
68	21	113,343	886,654
69	22	102,790	773,311
70	23	92,740·4	670,520·9
71	24	83,208·1	577,780·5
72	25	74,205·9	494,572·4
73	26	65,747·0	420,366·5
74	27	57,843·7	354,619·5
75	28	50,506·4	296,775·8
76	29	43,742·4	246,269·4
77	30	37,555·3	202,527·0
78	31	31,943·8	164,971·7
79	32	26,901·2	133,027·9
80	33	22,415·0	106,126·7
81	34	18,466·9	83,711·7
82	35	15,032·3	65,244·8
83	36	12,081·3	50,212·5
84	37	9,579·27	38,131·16
85	38	7,487·51	28,551·89
86	39	5,764·71	21,064·38
87	40	4,368·08	15,299·67
88	41	3,254·64	10,931·59
89	42	2,382·50	7,676·95
90	43	1,711·91	5,294·45
91	44	1,206·27	3,582·54
92	45	832·741	2,376·267
93	46	562·659	1,543·526
94	47	371·718	980·867
95	48	239·865	609·149
96	49	151·024	369·284
97	50	92·6785	218·2597
98	51	55·3715	125·5812
99	52	32·1717	70·2097
100	53	18·1569	38·0380
101	54	9·9420	19·8811
		Male 47 Years older.	
102	55	5·2673	9·9391
103	56	2·6988	4·6718
104	57	1·3355	1·9730
105	58	·6375	·6375
		Male 60 Years older.	
60	0	366,806	3,106,745
61	1	298,128	2,739,939
62	2	262,108	2,441,811
63	3	236,369	2,179,703
64	4	215,039	1,943,334
65	5	196,333	1,728,295
66	6	179,449	1,531,962
67	7	163,856	1,352,513
68	8	149,226	1,188,657
69	9	135,481	1,039,431
70	10	122,530	903,950
71	11	110,308	781,420
72	12	98,776·9	671,111·7
73	13	87,915·1	572,334·8
74	14	77,716·7	484,419·7
75	15	68,185·3	406,703·0
76	16	59,330·6	338,517·7
77	17	51,164·1	279,187·1
78	18	43,695·8	228,023·0
79	19	36,931·3	184,327·2
80	20	30,868·8	147,395·9
81	21	25,498·4	116,527·1
82	22	20,810·2	91,028·7
83	23	16,768·6	70,218·5
84	24	13,330·6	53,449·9
85	25	10,447·3	40,119·3
86	26	8,065·03	29,672·03
87	27	6,127·82	21,607·00
88	28	4,578·63	15,479·18
89	29	3,361·37	10,900·55
90	30	2,422·47	7,539·18
91	31	1,712·24	5,116·71
92	32	1,185·83	3,404·47
93	33	803·918	2,218·641
94	34	532·967	1,414·723
95	35	345·180	881·756
96	36	218·170	536·576
97	37	134·426	318·406
98	38	80·6554	183·9800
99	39	47·0720	103·3246
100	40	26·6915	56·2526
101	41	14·6878	29·5611
102	42	7·8342	14·8733
103	43	4·0454	7·0391
104	44	2·0198	2·9937
105	45	·9739	·9739

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 48 Years older than Female.

Male 59 Years older than Female.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 48 Years older.**	
48	0	580,537	6,509,299
49	1	479,242	5,928,762
50	2	428,587	5,449,520
51	3	393,817	5,020,933
52	4	365,559	4,627,116
53	5	341,237	4,261,557
54	6	319,622	3,920,320
55	7	299,864	3,600,698
56	8	281,405	3,300,834
57	9	264,104	3,019,429
58	10	247,772	2,755,325
59	11	232,253	2,507,553
60	12	217,423	2,275,300
61	13	203,183	2,057,877
62	14	189,458	1,854,694
63	15	176,194	1,665,236
64	16	163,354	1,489,042
65	17	150,918	1,325,688
66	18	138,880	1,174,770
67	19	127,243	1,035,890
68	20	116,025	908,647
69	21	105,245	792,622
70	22	94,976·1	687,376·9
71	23	85,231·9	592,400·8
72	24	76,026·3	507,168·9
73	25	67,373·4	431,142·6
74	26	59,286·3	363,769·2
75	27	51,776·0	304,482·9
76	28	44,850·7	252,706·9
77	29	38,514·2	207,856·2
78	30	32,765·7	169,342·0
79	31	27,598·8	136,576·3
80	32	23,000·9	108,977·5
81	33	18,953·4	85,976·6
82	34	15,431·5	67,023·2
83	35	12,404·8	51,591·7
84	36	9,837·96	39,186·85
85	37	7,691·48	29,348·89
86	38	5,923·16	21,657·41
87	39	4,489·27	15,734·25
88	40	3,345·82	11,244·98
89	41	2,449·91	7,899·16
90	42	1,760·86	5,449·25
91	43	1,241·14	3,688·39
92	44	857·084	2,447·250
93	45	579·301	1,590·166
94	46	382·848	1,010·865
95	47	247·140	628·017
96	48	155·665	380·877
97	49	95·5665	225·2121
98	50	57·1219	129·6456
99	51	33·2041	72·5237
100	52	18·7486	39·3196
101	53	10·2713	20·5710
102	54	5·4529	10·2997
103	55	2·7976	4·8468
104	56	1·3864	2·0492
105	57	·6628	·6628
		Male 59 Years older.	
59	0	384,009	3,346,254
60	1	312,736	2,962,245
61	2	275,566	2,649,509
62	3	249,125	2,373,943
63	4	227,271	2,124,818
64	5	208,138	1,897,547
65	6	190,884	1,689,409
66	7	174,950	1,498,525
67	8	159,986	1,323,575
68	9	145,906	1,163,589
69	10	132,610	1,017,683
70	11	120,026	885,073
71	12	108,108	765,047
72	13	96,830·8	656,939·4
73	14	86,185·8	560,108·6
74	15	76,176·0	473,922·8
75	16	66,812·2	397,746·8
76	17	58,109·5	330,934·6
77	18	50,083·1	272,825·1
78	19	42,745·5	222,742·0
79	20	36,103·3	179,996·5
80	21	30,155·5	143,893·2
81	22	24,903·6	113,737·7
82	23	20,320·4	88,834·1
83	24	16,370·4	68,513·7
84	25	13,011·4	52,143·3
85	26	10,195·1	39,131·9
86	27	7,868·79	28,936·75
87	28	5,977·56	21,067·96
88	29	4,465·49	15,090·40
89	30	3,277·68	10,624·91
90	31	2,361·70	7,347·23
91	32	1,668·96	4,985·53
92	33	1,155·63	3,316·57
93	34	783·283	2,160·937
94	35	519·179	1,377·654
95	36	336·178	858·475
96	37	212·433	522·297
97	38	130·861	309·864
98	39	78·4977	179·0033
99	40	45·8013	100·5056
100	41	25·9641	54·7043
101	42	14·2836	28·7402
102	43	7·6164	14·4566
103	44	3·9318	6·8402
104	45	1·9625	2·9084
105	46	·9459	·9459

JOINT LIVES :—MALE AND FEMALE LIFE.

Male 49 Years older than Female.

Male 58 Years older than Female.

Male 49 Years older.

Ages x	Ages y	$D_{x, y}$	$N_{x, y}$
49	0	562,100	6,183,561
50	1	463,678	5,621,461
51	2	414,341	5,157,783
52	3	380,194	4,743,442
53	4	352,552	4,363,248
54	5	328,746	4,010,696
55	6	307,575	3,681,950
56	7	288,212	3,374,375
57	8	270,112	3,086,163
58	9	253,136	2,816,051
59	10	237,098	2,562,915
60	11	221,848	2,325,817
61	12	207,267	2,103,969
62	13	193,260	1,896,702
63	14	179,758	1,703,442
64	15	166,712	1,523,684
65	16	154,090	1,356,972
66	17	141,877	1,202,882
67	18	130,073	1,061,005
68	19	118,685	930,932
69	20	107,734	812,247
70	21	97,244·7	704,513·0
71	22	87,286·7	607,268·3
72	23	77,875·5	519,981·6
73	24	69,026·2	442,106·1
74	25	60,752·9	373,079·9
75	26	53,067·3	312,327·0
76	27	45,978·1	259,259·7
77	28	39,490·0	213,281·6
78	29	33,602·4	173,791·6
79	30	28,308·9	140,189·2
80	31	23,597·4	111,880·3
81	32	19,448·8	88,282·9
82	33	15,838·1	68,834·1
83	34	12,734·3	52,996·0
84	35	10,101·4	40,261·7
85	36	7,899·19	30,160·33
86	37	6,084·52	22,261·14
87	38	4,612·67	16,176·62
88	39	3,438·64	11,563·95
89	40	2,518·54	8,125·31
90	41	1,810·68	5,606·77
91	42	1,276·63	3,796·09
92	43	881·857	2,519·461
93	44	596·235	1,637·604
94	45	394·172	1,041·369
95	46	254·540	647·197
96	47	160·386	392·657
97	48	98·5037	232·2707
98	49	58·9019	133·7670
99	50	34·2538	74·8651
100	51	19·3503	40·6113
101	52	10·6060	21·2610
102	53	5·6335	10·6550
103	54	2·8963	5·0215
104	55	1·4372	2·1252
105	56	·6880	·6880

Male 58 Years older.

Ages x	Ages y	$D_{x, y}$	$N_{x, y}$
58	0	401,296	3,594,083
59	1	327,403	3,192,787
60	2	289,068	2,865,384
61	3	261,916	2,576,316
62	4	239,535	2,314,400
63	5	219,977	2,074,865
64	6	202,361	1,854,888
65	7	186,099	1,652,527
66	8	170,819	1,466,428
67	9	156,427	1,295,609
68	10	142,814	1,139,182
69	11	129,900	996,368
70	12	117,632	866,468
71	13	105,978	748,836
72	14	94,926·1	642,858·3
73	15	84,477·2	547,932·2
74	16	74,642·0	463,455·0
75	17	65,437·2	388,813·0
76	18	56,881·8	323,375·8
77	19	48,993·8	266,494·0
78	20	41,787·1	217,500·2
79	21	35,269·0	175,713·1
80	22	29,452·0	140,444·1
81	23	24,317·4	110,992·1
82	24	19,837·8	86,674·7
83	25	15,978·5	66,836·9
84	26	12,697·3	50,858·4
85	27	9,946·98	38,161·12
86	28	7,675·84	28,214·14
87	29	5,829·86	20,538·30
88	30	4,354·31	14,708·44
89	31	3,195·45	10,354·13
90	32	2,302·00	7,158·68
91	33	1,626·45	4,856·68
92	34	1,125·96	3,230·23
93	35	763·019	2,104·271
94	36	505·639	1,341·252
95	37	327·338	835·613
96	38	206·800	508·275
97	39	127·360	301·475
98	40	76·3786	174·1152
99	41	44·5532	97·7366
100	42	25·2497	53·1834
101	43	13·8866	27·9337
102	44	7·4025	14·0471
103	45	3·8201	6·6446
104	46	1·9061	2·8245
105	47	·9184	·9184

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 50 Years older than Female.

Male 51 Years older than Female.

Ages		$D_{x, y}$	$N_{x, y}$	Ages		$D_{x, y}$	$N_{x, y}$
x	y	Male 50 Years older.		x	y	Male 51 Years older.	
50	0	543,845	5,865,184	51	0	525,768	5,554,198
51	1	448,266	5,321,339	52	1	432,759	5,028,430
52	2	400,008	4,873,073	53	2	385,775	4,595,671
53	3	366,666	4,473,065	54	3	353,243	4,209,896
54	4	339,646	4,106,399	55	4	326,844	3,856,653
55	5	316,355	3,766,753	56	5	304,061	3,529,809
56	6	295,623	3,450,398	57	6	283,759	3,225,748
57	7	276,646	3,154,775	58	7	265,157	2,941,989
58	8	258,895	2,878,129	59	8	247,742	2,676,832
59	9	242,231	2,619,234	60	9	231,380	2,429,090
60	10	226,476	2,377,003	61	10	215,898	2,197,710
61	11	211,485	2,150,527	62	11	201,157	1,981,812
62	12	197,144	1,939,042	63	12	187,050	1,780,655
63	13	183,365	1,741,898	64	13	173,496	1,593,605
64	14	170,083	1,558,533	65	14	160,437	1,420,109
65	15	157,256	1,388,450	66	15	147,835	1,259,672
66	16	144,858	1,231,194	67	16	135,672	1,111,837
67	17	132,880	1,086,336	68	17	123,943	976,165
68	18	121,324	953,456	69	18	112,655	852,222
69	19	110,205	832,132	70	19	101,828	739,567
70	20	99,545·2	721,926·9	71	20	91,485·8	637,739·4
71	21	89,371·6	622,381·7	72	21	81,657·9	546,253·6
72	22	79,752·9	533,010·1	73	22	72,409·7	464,595·7
73	23	70,705·2	453,257·2	74	23	63,757·2	392,186·0
74	24	62,243·3	382,552·0	75	24	55,714·1	328,428·8
75	25	54,380·0	320,308·7	76	25	48,290·5	272,714·7
76	26	47,124·8	265,928·7	77	26	41,492·3	224,424·2
77	27	40,482·7	218,803·9	78	27	35,319·8	182,931·9
78	28	34,453·7	178,321·2	79	28	29,767·3	147,612·1
79	29	29,031·8	143,867·5	80	29	24,822·6	117,844·8
80	30	24,204·6	114,835·7	81	30	20,466·6	93,022·2
81	31	19,953·1	90,631·1	82	31	16,673·5	72,555·6
82	32	16,252·0	70,678·0	83	32	13,411·4	55,882·1
83	33	13,069·8	54,426·0	84	33	10,642·9	42,470·7
84	34	10,369·7	41,356·2	85	34	8,326·11	31,827·80
85	35	8,110·71	30,986·53	86	35	6,416·16	23,501·69
86	36	6,248·83	22,875·82	87	36	4,866·28	17,085·53
87	37	4,738·32	16,626·99	88	37	3,629·41	12,219·25
88	38	3,533·16	11,888·67	89	38	2,659·56	8,589·84
89	39	2,588·41	8,355·51	90	39	1,913·05	5,930·28
90	40	1,861·41	5,767·10	91	40	1,349·52	4,017·23
91	41	1,312·75	3,905·69	92	41	932·736	2,667·706
92	42	907·070	2,592·935	93	42	631·009	1,734·970
93	43	613·469	1,685·865	94	43	417·421	1,103·961
94	44	405·695	1,072·396	95	44	269·729	686·540
95	45	262·069	666·701	96	45	170·075	416·811
96	46	165·189	404·632	97	46	104·530	246·736
97	47	101·491	239·443	98	47	62·5535	142·2056
98	48	60·7122	137·9522	99	48	36·4067	79·6521
99	49	35·3212	77·2400	100	49	20·5840	43·2454
100	50	19·9620	41·9188	101	50	11·2924	22·6614
101	51	10·9464	21·9568	102	51	6·0038	11·3690
102	52	5·8171	11·0104	103	52	3·0897	5·3652
103	53	2·9922	5·1933	104	53	1·5371	2·2755
104	54	1·4879	2·2011	105	54	·7384	·7384
105	55	·7132	·7132				

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 52 Years older than Female.

Male 53 Years older than Female.

Ages		$D_{x, y}$	$N_{x, y}$	Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Male 52 Years older.**		x	y	**Male 53 Years older.**	
52	0	507,580	5,250,606	53	0	489,519	4,954,731
53	1	417,361	4,743,026	54	1	402,082	4,465,212
54	2	371,653	4,325,665	55	2	357,644	4,063,130
55	3	339,929	3,954,012	56	3	326,720	3,705,486
56	4	314,143	3,614,083	57	4	301,536	3,378,766
57	5	291,859	3,299,940	58	5	279,738	3,077,230
58	6	271,975	3,008,081	59	6	260,258	2,797,492
59	7	253,734	2,736,106	60	7	242,367	2,537,234
60	8	236,643	2,482,372	61	8	225,590	2,294,867
61	9	220,572	2,245,729	62	9	209,800	2,069,277
62	10	205,354	2,025,157	63	10	194,839	1,859,477
63	11	190,858	1,819,803	64	11	180,586	1,664,638
64	12	176,983	1,628,945	65	12	166,945	1,484,052
65	13	163,656	1,451,962	66	13	153,852	1,317,107
66	14	150,826	1,288,306	67	14	141,261	1,163,255
67	15	138,460	1,137,480	68	15	129,148	1,021,994
68	16	126,547	999,020	69	16	117,505	892,846
69	17	115,087	872,473	70	17	106,339	775,341
70	18	104,092	757,386	71	18	95,664·5	669,001·8
71	19	93,583·9	653,294·3	72	19	85,506·5	573,337·3
72	20	83,589·6	559,710·4	73	20	75,893·1	487,830·8
73	21	74,139·3	476,120·8	74	21	66,853·9	411,937·7
74	22	65,294·3	401,981·5	75	22	58,445·1	345,083·8
75	23	57,069·3	336,687·2	76	23	50,678·6	286,638·7
76	24	49,475·2	279,617·9	77	24	43,561·8	235,960·1
77	25	42,518·7	230,142·7	78	25	37,096·1	192,398·3
78	26	36,200·6	187,624·0	79	26	31,276·6	155,302·2
79	27	30,515·6	151,423·4	80	27	26,091·3	124,025·6
80	28	25,451·5	120,907·8	81	28	21,520·9	97,934·3
81	29	20,989·1	95,456·3	82	29	17,539·2	76,413·4
82	30	17,102·5	74,467·2	83	30	14,113·2	58,874·2
83	31	13,759·2	57,364·7	84	31	11,204·2	44,761·0
84	32	10,921·0	43,605·5	85	32	8,768·80	33,556·75
85	33	8,545·46	32,684·45	86	33	6,760·08	24,787·95
86	34	6,586·56	24,138·99	87	34	5,129·29	18,027·87
87	35	4,996·59	17,552·43	88	35	3,827·24	12,898·58
88	36	3,727·42	12,555·84	89	36	2,805·79	9,071·34
89	37	2,732·01	8,828·42	90	37	2,019·18	6,265·55
90	38	1,965·63	6,096·41	91	38	1,425·09	4,246·37
91	39	1,386·97	4,130·78	92	39	985·468	2,821·279
92	40	958·865	2,743·811	93	40	667·040	1,835·811
93	41	648·864	1,784·946	94	41	441·505	1,168·771
94	42	429·356	1,136·082	95	42	285·461	727·266
95	43	277·526	706·726	96	43	180·106	441·805
96	44	175·047	429·200	97	44	110·768	261·699
97	45	107·622	254·153	98	45	66·3321	150·9307
98	46	64·4265	146·5309	99	46	38·6341	84·5986
99	47	37·5109	82·1044	100	47	21·8601	45·9645
100	48	21·2167	44·5935	101	48	12·0022	24·1044
101	49	11·6443	23·3768	102	49	6·3866	12·1022
102	50	6·1936	11·7325	103	50	3·2897	5·7156
103	51	3·1889	5·5389	104	51	1·6382	2·4259
104	52	1·5872	2·3500	105	52	·7877	·7877
105	53	·7628	·7628				

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 54 Years older than Female.

Male 55 Years older than Female.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 54 Years older.**		x	y	**Male 55 Years older.**	
54	0	471,599	4,666,671	55	0	453,824	4,386,500
55	1	386,927	4,195,072	56	1	371,891	3,932,676
56	2	343,747	3,808,145	57	2	329,952	3,560,785
57	3	313,608	3,464,398	58	3	300,584	3,230,833
58	4	289,014	3,150,790	59	4	276,563	2,930,249
59	5	267,688	2,861,776	60	5	255,696	2,653,686
60	6	248,599	2,594,088	61	6	236,987	2,397,990
61	7	231,046	2,345,489	62	7	219,762	2,161,003
62	8	214,572	2,114,443	63	8	203,586	1,941,241
63	9	199,058	1,899,871	64	9	188,344	1,737,655
64	10	184,353	1,700,813	65	10	173,897	1,549,311
65	11	170,344	1,516,460	66	11	160,139	1,375,414
66	12	156,944	1,346,116	67	12	146,991	1,215,275
67	13	144,095	1,189,172	68	13	134,404	1,068,284
68	14	131,760	1,045,077	69	14	122,346	933,880
69	15	119,920	913,317	70	15	110,805	811,534
70	16	108,573	793,397	71	16	99,782·9	700,729·3
71	17	97,729·3	684,823·8	72	17	89,294·2	600,946·4
72	18	87,407·6	587,094·5	73	18	79,359·6	511,652·2
73	19	77,633·6	499,686·9	74	19	70,004·8	432,292·6
74	20	68,435·4	422,053·3	75	20	61,256·7	362,287·8
75	21	59,841·1	353,617·9	76	21	53,140·0	301,031·1
76	22	51,900·4	293,776·8	77	22	45,697·1	247,891·1
77	23	44,621·4	241,876·4	78	23	38,930·6	202,194·0
78	24	38,006·2	197,255·0	79	24	32,836·6	163,263·4
79	25	32,050·3	159,248·8	80	25	27,403·5	130,426·8
80	26	26,742·0	127,198·5	81	26	22,612·1	103,023·3
81	27	22,061·9	100,456·5	82	27	18,435·6	80,411·2
82	28	17,983·6	78,394·6	83	28	14,840·3	61,975·6
83	29	14,473·6	60,411·0	84	29	11,786·0	47,135·3
84	30	11,492·5	45,937·4	85	30	9,227·69	35,349·28
85	31	8,996·20	34,444·94	86	31	7,116·65	26,121·59
86	32	6,936·76	25,448·74	87	32	5,402·01	19,004·94
87	33	5,264·41	18,511·98	88	33	4,032·38	13,602·93
88	34	3,928·88	13,247·57	89	34	2,957·43	9,570·55
89	35	2,880·92	9,318·69	90	35	2,129·24	6,613·12
90	36	2,073·71	6,437·77	91	36	1,503·44	4,483·88
91	37	1,463·91	4,364·06	92	37	1,040·14	2,980·44
92	38	1,012·56	2,900·15	93	38	704·391	1,940·303
93	39	685·547	1,887·590	94	39	466·465	1,235·912
94	40	453·873	1,202·043	95	40	301·761	769·447
95	41	293·538	748·170	96	41	190·497	467·686
96	42	185·256	454·632	97	42	117·228	277·189
97	43	113·969	269·376	98	43	70·2445	159·9611
98	44	68·2712	155·4069	99	44	40·9395	89·7166
99	45	39·7768	87·1357	100	45	23·1806	48·7771
100	46	22·5147	47·3589	101	46	12·7364	25·5965
101	47	12·3662	24·8442	102	47	6·7825	12·8601
102	48	6·5829	12·4780	103	48	3·4964	6·0776
103	49	3·3922	5·8951	104	49	1·7426	2·5812
104	50	1·6900	2·5029	105	50	·8386	·8386
105	51	·8129	·8129				

JOINT LIVES:—MALE AND FEMALE LIFE.

Male 56 Years older than Female.

Male 57* Years older than Female.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Male 56 Years older.**		x	y	**Male 57* Years older.**	
56	0	436,189	4,114,295	57	0	418,684	3,850,128
57	1	356,967	3,678,106	58	1	342,142	3,431,444
58	2	316,249	3,321,139	59	2	302,625	3,089,302
59	3	287,635	3,004,890	60	3	274,750	2,786,677
60	4	264,174	2,717,255	61	4	251,834	2,511,927
61	5	243,752	2,453,081	62	5	231,848	2,260,093
62	6	225,413	2,209,329	63	6	213,872	2,028,245
63	7	208,510	1,983,916	64	7	197,288	1,814,373
64	8	192,629	1,775,406	65	8	181,704	1,617,085
65	9	177,662	1,582,777	66	9	167,019	1,435,381
66	10	163,480	1,405,115	67	10	153,112	1,268,362
67	11	149,983	1,241,635	68	11	139,896	1,115,250
68	12	137,105	1,091,652	69	12	127,309	975,354
69	13	124,800	954,547	70	13	115,314	848,045
70	14	113,046	829,747	71	14	103,893	732,731
71	15	101,834	716,701	72	15	93,044·2	628,838·3
72	16	91,170·5	614,866·6	73	16	82,776·1	535,794·1
73	17	81,072·5	523,696·1	74	17	73,105·8	453,018·0
74	18	71,561·3	442,623·6	75	18	64,054·7	379,912·2
75	19	62,661·5	371,062·3	76	19	55,644·7	315,857·5
76	20	54,397·1	308,400·8	77	20	47,895·4	260,212·8
77	21	46,788·6	254,003·7	78	21	40,821·5	212,317·4
78	22	39,869·2	207,215·1	79	22	34,446·2	171,495·9
79	23	33,635·3	167,345·9	80	23	28,758·7	137,049·7
80	24	28,075·8	133,710·6	81	24	23,739·9	108,291·0
81	25	23,171·5	105,634·8	82	25	19,362·8	84,551·1
82	26	18,895·4	82,463·3	83	26	15,592·7	65,188·3
83	27	15,213·3	63,567·9	84	27	12,388·4	49,595·6
84	28	12,084·6	48,354·6	85	28	9,703·07	37,207·22
85	29	9,463·31	36,270·00	86	29	7,486·17	27,504·15
86	30	7,299·78	26,806·69	87	30	5,684·70	20,017·98
87	31	5,542·10	19,506·91	88	31	4,245·08	14,333·28
88	32	4,137·77	13,964·81	89	32	3,114·68	10,088·20
89	33	3,035·35	9,827·04	90	33	2,243·37	6,973·52
90	34	2,185·79	6,791·69	91	34	1,584·70	4,730·15
91	35	1,543·70	4,605·90	92	35	1,096·83	3,145·45
92	36	1,068·23	3,062·20	93	36	743·120	2,048·623
93	37	723·579	1,993·974	94	37	492·343	1,305·503
94	38	479·287	1,270·395	95	38	318·658	813·160
95	39	310·133	791·108	96	39	201·267	494·502
96	40	195·834	480·975	97	40	123·922	293·235
97	41	120·545	285·141	98	41	74·2973	169·3134
98	42	72·2529	164·5962	99	42	43·3272	95·0161
99	43	42·1228	92·3433	100	43	24·5478	51·6889
100	44	23·8582	50·2205	101	44	13·4965	27·1411
101	45	13·1132	26·3623	102	45	7·1922	13·6446
102	46	6·9856	13·2491	103	46	3·7103	6·4524
103	47	3·6025	6·2635	104	47	1·8507	2·7421
104	48	1·7962	2·6610	105	48	·8914	·8914
105	49	·8648	·8648				

* NOTE.—The Columns $D_{x,y}$ and $N_{x,y}$ for **Male 58 Years older than Female,** are printed on page 297; and the corresponding Columns for **Male 59–105 Years older** will be found by reading the Tables backwards, from p. 296 to p. 250.

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 1 Year older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	Female 1 Year older.		x	y	Female 1 Year older.	
0	1	2,130,306	31,186,430	55	56	84,150·5	806,005·6
1	2	1,622,790	29,056,124	56	57	77,913·3	721,855·1
2	3	1,422,061	27,433,334	57	58	71,936·4	643,941·8
3	4	1,299,443	26,011,273	58	59	66,215·9	572,005·4
4	5	1,209,732	24,711,830	59	60	60,747·0	505,789·5
5	6	1,138,252	23,502,098	60	61	55,524·9	445,042·5
6	7	1,078,577	22,363,846	61	62	50,545·2	389,517·6
7	8	1,026,428	21,285,269	62	63	45,804·8	338,972·4
8	9	979,817	20,258,841	63	64	41,301·8	293,167·6
9	10	937,768	19,279,024	64	65	37,035·6	251,865·8
10	11	899,276	18,341,256	65	66	33,007·0	214,830·2
11	12	863,529	17,441,980	66	67	29,218·3	181,823·2
12	13	829,875	16,578,451	67	68	25,672·4	152,604·9
13	14	797,793	15,748,576	68	69	22,373·0	126,932·5
14	15	766,876	14,950,783	69	70	19,323·5	104,559·5
15	16	736,815	14,183,907	70	71	16,526·8	85,236·0
16	17	707,387	13,447,092	71	72	13,984·7	68,709·2
17	18	678,442	12,739,705	72	73	11,697·0	54,724·5
18	19	649,893	12,061,263	73	74	9,661·09	43,027·53
19	20	621,711	11,411,370	74	75	7,871·60	33,366·44
20	21	593,911	10,789,659	75	76	6,320·00	25,494·84
21	22	566,811	10,195,748	76	77	4,994·58	19,174·84
22	23	540,731	9,628,937	77	78	3,880·59	14,180·26
23	24	515,650	9,088,206	78	79	2,960·63	10,299·67
24	25	491,546	8,572,556	79	80	2,215·15	7,339·04
25	26	468,394	8,081,010	80	81	1,623·24	5,123·89
26	27	446,168	7,612,616	81	82	1,163·39	3,500·65
27	28	424,840	7,166,448	82	83	814·354	2,337·259
28	29	404,382	6,741,608	83	84	555·920	1,522·905
29	30	384,765	6,337,226	84	85	369·540	966·985
30	31	365,959	5,952,461	85	86	238·826	597·445
31	32	347,934	5,586,502	86	87	149·820	358·619
32	33	330,662	5,238,568	87	88	91·0755	208·7992
33	34	314,114	4,907,906	88	89	53·5593	117·7237
34	35	298,260	4,593,792	89	90	30·4162	64·1644
35	36	283,073	4,295,532	90	91	16·6503	33·7482
36	37	268,527	4,012,459	91	92	8·7697	17·0979
37	38	254,594	3,743,932	92	93	4·4356	8·3282
38	39	241,249	3,489,338	93	94	2·1502	3·8926
39	40	228,469	3,248,089	94	95	·9970	1·7424
40	41	216,229	3,019,620	95	96	·4413	·7454
41	42	204,507	2,803,391	96	97	·1860	·3041
42	43	193,282	2,598,884	97	98	·0746	·1181
43	44	182,533	2,405,602	98	99	·0283	·0435
44	45	172,242	2,223,069	99	100	·0102	·0152
45	46	162,390	2,050,827	100	101	·0035	·0050
46	47	152,961	1,888,437	101	102	·0011	·0015
47	48	143,937	1,735,476	102	103	·0003	·0004
48	49	135,304	1,591,539	103	104	·0001	·0001
49	50	127,048	1,456,235	104	105	·0000	·0000
50	51	119,155	1,329,187				
51	52	111,613	1,210,032				
52	53	104,351	1,098,419				
53	54	97,412·1	994,068·0				
54	55	90,650·3	896,655·9				

JOINT LIVES :—Male and Female Life.

Female 2 Years older than Male.

Female 105 Years older than Male.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
		Female 2 Years older.	
0	2	1,969,085	30,239,777
1	3	1,542,407	28,270,692
2	4	1,367,321	26,728,285
3	5	1,257,740	25,360,964
4	6	1,176,158	24,103,224
5	7	1,109,718	22,927,066
6	8	1,053,105	21,817,348
7	9	1,003,596	20,764,243
8	10	959,053	19,760,647
9	11	918,603	18,801,594
10	12	881,336	17,882,991
11	13	846,515	17,001,655
12	14	813,551	16,155,140
13	15	781,977	15,341,589
14	16	751,434	14,559,612
15	17	721,651	13,808,178
16	18	692,442	13,086,527
17	19	663,686	12,394,085
18	20	635,323	11,730,399
19	21	607,344	11,095,076
20	22	580,055	10,487,732
21	23	553,468	9,907,677
22	24	527,891	9,354,209
23	25	503,302	8,826,318
24	26	479,679	8,323,016
25	27	456,997	7,843,337
26	28	435,227	7,386,340
27	29	414,342	6,951,113
28	30	394,314	6,536,771
29	31	375,112	6,142,457
30	32	356,708	5,767,345
31	33	339,072	5,410,637
32	34	322,175	5,071,565
33	35	305,987	4,749,390
34	36	290,481	4,443,403
35	37	275,630	4,152,922
36	38	261,406	3,877,292
37	39	247,783	3,615,886
38	40	234,737	3,368,103
39	41	222,243	3,133,366
40	42	210,279	2,911,123
41	43	198,822	2,700,844
42	44	187,852	2,502,022
43	45	177,349	2,314,170
44	46	167,294	2,136,821
45	47	157,669	1,969,527
46	48	148,458	1,811,858
47	49	139,645	1,663,400
48	50	131,216	1,523,755
49	51	123,155	1,392,539
50	52	115,451	1,269,384
51	53	108,090	1,153,933
52	54	101,006	1,045,843
53	55	94,094·9	944,836·9
54	56	87,446·5	850,742·0
55	57	81,063·3	763,295·5
56	58	74,944·0	682,232·2
57	59	69,085·0	607,288·2
58	60	63,481·7	538,203·2
59	61	58,128·9	474,721·5
60	62	53,021·9	416,592·6
61	63	48,156·7	363,570·7
62	64	43,530·6	315,414·0
63	65	39,142·2	271,883·4
64	66	34,991·6	232,741·2
65	67	31,080·3	197,749·6
66	68	27,410·7	166,669·3
67	69	23,986·2	139,258·6
68	70	20,810·4	115,272·4
69	71	17,886·4	94,462·0
70	72	15,216·7	76,575·6
71	73	12,801·9	61,358·9
72	74	10,640·8	48,557·0
73	75	8,729·41	37,916·17
74	76	7,060·64	29,186·76
75	77	5,624·40	22,126·12
76	78	4,407·38	16,501·72
77	79	3,393·40	12,094·34
78	80	2,563·89	8,700·94
79	81	1,898·49	6,137·05
80	82	1,375·87	4,238·56
81	83	974·537	2,862·690
82	84	673·669	1,888·153
83	85	453·808	1,214·484
84	86	297·443	760·676
85	87	189·388	463·233
86	88	116·951	273·845
87	89	69·9236	156·8939
88	90	40·4071	86·9703
89	91	22·5284	46·5632
90	92	12·0960	24·0348
91	93	6·2427	11·9388
92	94	3·0909	5·6961
93	95	1·4653	2·6052
94	96	·6637	1·1399
95	97	·2867	·4762
96	98	·1178	·1895
97	99	·0460	·0717
98	100	·0170	·0257
99	101	·0059	·0087
100	102	·0020	·0028
101	103	·0006	·0008
102	104	·0002	·0002
103	105	·0000	·0000
		Female 105 Years older.	
0	105	8·2374	8·2374

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 3 Years older than Male.

Female 104 Years older than Male.

Ages		$D_{x,\ y}$	$N_{x,\ y}$
x	*y*	**Female 3 Years older.**	
0	3	1,871,549	29,413,026
1	4	1,483,035	27,541,477
2	5	1,323,440	26,058,442
3	6	1,222,834	24,735,002
4	7	1,146,674	23,512,168
5	8	1,083,510	22,365,494
6	9	1,029,681	21,281,984
7	10	982,329	20,252,303
8	11	939,454	19,269,974
9	12	900,278	18,330,520
10	13	863,971	17,430,242
11	14	829,864	16,566,271
12	15	797,423	15,736,407
13	16	766,230	14,938,984
14	17	735,968	14,172,754
15	18	706,405	13,436,786
16	19	677,381	12,730,381
17	20	648,806	12,053,000
18	21	620,641	11,404,194
19	22	593,175	10,783,553
20	23	566,401	10,190,378
21	24	540,326	9,623,977
22	25	515,250	9,083,651
23	26	491,152	8,568,401
24	27	468,008	8,077,249
25	28	445,790	7,609,241
26	29	424,473	7,163,451
27	30	404,026	6,738,978
28	31	384,422	6,334,952
29	32	365,631	5,950,530
30	33	347,622	5,584,899
31	34	330,369	5,237,277
32	35	313,840	4,906,908
33	36	298,007	4,593,068
34	37	282,843	4,295,061
35	38	268,320	4,012,218
36	39	254,412	3,743,898
37	40	241,094	3,489,486
38	41	228,340	3,248,392
39	42	216,127	3,020,052
40	43	204,433	2,803,925
41	44	193,237	2,599,492
42	45	182,517	2,406,255
43	46	172,254	2,223,738
44	47	162,430	2,051,484
45	48	153,028	1,889,054
46	49	144,032	1,736,026
47	50	135,425	1,591,994
48	51	127,195	1,456,569
49	52	119,326	1,329,374
50	53	111,807	1,210,048
51	54	104,625	1,098,241
52	55	97,566·4	993,615·5
53	56	90,769·3	896,049·1
54	57	84,238·5	805,279·8
55	58	77,974·0	721,041·3
56	59	71,973·4	643,067·3
57	60	66,232·3	571,093·9
58	61	60,745·7	504,861·6
59	62	55,508·6	444,115·9
60	63	50,516·4	388,607·3
61	64	45,765·7	338,090·9
62	65	41,254·5	292,325·2
63	66	36,982·0	251,070·7
64	67	32,949·0	214,088·7
65	68	29,157·5	181,139·7
66	69	25,610·3	151,982·2
67	70	22,311·0	126,371·9
68	71	19,262·8	104,060·9
69	72	16,468·5	84,798·1
70	73	13,929·7	68,329·6
71	74	11,646·0	54,399·9
72	75	9,614·67	42,753·90
73	76	7,830·07	33,139·23
74	77	6,283·53	25,309·16
75	78	4,963·15	19,025·63
76	79	3,854·05	14,062·48
77	80	2,938·67	10,208·43
78	81	2,197·37	7,269·76
79	82	1,609·17	5,072·39
80	83	1,152·53	3,463·22
81	84	806·179	2,310·694
82	85	549·928	1,504·515
83	86	365·270	954·587
84	87	235·871	589·317
85	88	147·838	353·446
86	89	89·7895	205·6075
87	90	52·7529	115·8180
88	91	29·9284	63·0651
89	92	16·3663	33·1367
90	93	8·6107	16·7704
91	94	4·3502	8·1597
92	95	2·1063	3·8095
93	96	·9755	1·7032
94	97	·4312	·7277
95	98	·1815	·2965
96	99	·0726	·1150
97	100	·0276	·0424
98	101	·0099	·0148
99	102	·0034	·0049
100	103	·0011	·0015
101	104	·0003	·0004
102	105	·0001	·0001
		Female 104 Years older.	
0	104	16·0706	22·8593
1	105	6·7887	6·7887

JOINT LIVES:—MALE AND FEMALE LIFE.

Female 4 Years older than Male.

Female 103 Years older than Male.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Female 4 Years older.**	
0	4	1,799,507	28,648,822
1	5	1,435,440	26,849,315
2	6	1,286,710	25,413,875
3	7	1,192,179	24,127,165
4	8	1,119,593	22,934,986
5	9	1,059,409	21,815,393
6	10	1,007,860	20,755,984
7	11	962,254	19,748,124
8	12	920,713	18,785,870
9	13	882,540	17,865,157
10	14	846,977	16,982,617
11	15	813,412	16,135,640
12	16	781,365	15,322,228
13	17	750,461	14,540,863
14	18	720,419	13,790,402
15	19	691,041	13,069,983
16	20	662,195	12,378,942
17	21	633,813	11,716,747
18	22	606,162	11,082,934
19	23	579,212	10,476,772
20	24	552,951	9,897,560
21	25	527,388	9,344,609
22	26	502,812	8,817,221
23	27	479,202	8,314,409
24	28	456,532	7,835,207
25	29	434,775	7,378,675
26	30	413,904	6,943,900
27	31	393,890	6,529,996
28	32	374,705	6,136,106
29	33	356,318	5,761,401
30	34	338,700	5,405,083
31	35	321,822	5,066,383
32	36	305,655	4,744,561
33	37	290,171	4,438,906
34	38	275,342	4,148,735
35	39	261,142	3,873,393
36	40	247,545	3,612,251
37	41	234,524	3,364,706
38	42	222,057	3,130,182
39	43	210,120	2,908,125
40	44	198,691	2,698,005
41	45	187,748	2,499,314
42	46	177,273	2,311,566
43	47	167,246	2,134,293
44	48	157,649	1,967,047
45	49	148,465	1,809,398
46	50	139,679	1,660,933
47	51	131,275	1,521,254
48	52	123,240	1,389,979
49	53	115,560	1,266,739
50	54	108,223	1,151,179
51	55	101,063	1,042,956
52	56	94,118·2	941,892·7
53	57	87,439·4	847,774·5
54	58	81,028·1	760,335·1
55	59	74,883·3	679,307·0
56	60	69,001·4	604,423·7
57	61	63,377·8	535,422·3
58	62	58,007·4	472,044·5
59	63	52,885·5	414,037·1
60	64	48,008·2	361,151·6
61	65	43,372·7	313,143·4
62	66	38,977·7	269,770·7
63	67	34,823·2	230,793·0
64	68	30,910·6	195,969·8
65	69	27,242·4	165,059·2
66	70	23,821·6	137,816·8
67	71	20,651·8	113,995·2
68	72	17,735·8	93,343·4
69	73	15,075·7	75,607·6
70	74	12,672·0	60,531·9
71	75	10,522·9	47,859·9
72	76	8,624·13	37,336·98
73	77	6,968·27	28,712·85
74	78	5,544·79	21,744·58
75	79	4,340·05	16,199·79
76	80	3,337·59	11,859·74
77	81	2,518·58	8,522·15
78	82	1,862·51	6,003·57
79	83	1,347·96	4,141·06
80	84	953·419	2,793·097
81	85	658·098	1,839·678
82	86	442·637	1,181·580
83	87	289·657	738·943
84	88	184·124	449·286
85	89	113·503	265·162
86	90	67·7405	151·6594
87	91	39·0726	83·9189
88	92	21·7422	44·8463
89	93	11·6505	23·1041
90	94	6·0003	11·4536
91	95	2·9645	5·4533
92	96	1·4022	2·4888
93	97	·6337	1·0866
94	98	·2731	·4529
95	99	·1119	·1798
96	100	·0436	·0679
97	101	·0161	·0243
98	102	·0056	·0082
99	103	·0018	·0026
100	104	·0006	·0008
101	105	·0002	·0002
Female 103 Years older.			
0	103	30·3080	49·8113
1	104	13·2443	19·5033
2	105	6·2590	6·2590

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 5 Years older than Male.
Female 102 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 5 Years older.**	
0	5	1,741,756	27,925,466
1	6	1,395,602	26,183,710
2	7	1,254,454	24,788,108
3	8	1,164,024	23,533,654
4	9	1,094,691	22,369,630
5	10	1,036,959	21,274,939
6	11	987,264	20,237,980
7	12	943,058	19,250,716
8	13	902,572	18,307,658
9	14	865,180	17,405,086
10	15	830,186	16,539,906
11	16	797,032	15,709,720
12	17	765,284	14,912,688
13	18	734,606	14,147,404
14	19	704,750	13,412,798
15	20	675,548	12,708,048
16	21	646,892	12,032,500
17	22	619,027	11,385,608
18	23	591,893	10,766,581
19	24	565,458	10,174,688
20	25	539,711	9,609,230
21	26	514,656	9,069,519
22	27	490,577	8,554,863
23	28	467,451	8,064,286
24	29	445,251	7,596,835
25	30	423,950	7,151,584
26	31	403,521	6,727,634
27	32	383,934	6,324,113
28	33	365,161	5,940,179
29	34	347,172	5,575,018
30	35	329,937	5,227,846
31	36	313,429	4,897,909
32	37	297,618	4,584,480
33	38	282,476	4,286,862
34	39	267,976	4,004,386
35	40	254,093	3,736,410
36	41	240,799	3,482,317
37	42	228,071	3,241,518
38	43	215,884	3,013,447
39	44	204,217	2,797,563
40	45	193,047	2,593,346
41	46	182,355	2,400,299
42	47	172,119	2,217,944
43	48	162,323	2,045,825
44	49	152,948	1,883,502
45	50	143,979	1,730,554
46	51	135,399	1,586,575
47	52	127,194	1,451,176
48	53	119,350	1,323,982
49	54	111,855	1,204,632
50	55	104,537	1,092,777
51	56	97,490·7	988,240·4
52	57	90,665·4	890,749·7
53	58	84,107·0	800,084·3
54	59	77,816·3	715,977·3
55	60	71,791·2	638,161·0
56	61	66,027·6	566,369·8
57	62	60,520·9	500,342·2
58	63	55,266·3	439,821·3
59	64	50,259·7	384,555·0
60	65	45,498·0	334,295·3
61	66	40,979·0	288,797·3
62	67	36,702·4	247,818·3
63	68	32,668·8	211,115·9
64	69	28,880·3	178,447·1
65	70	25,339·7	149,566·8
66	71	22,050·1	124,227·1
67	72	19,014·6	102,177·0
68	73	16,235·7	83,162·4
69	74	13,714·5	66,926·7
70	75	11,449·9	53,212·2
71	76	9,438·81	41,762·32
72	77	7,674·94	32,323·51
73	78	6,149·03	24,648·57
74	79	4,848·66	18,499·54
75	80	3,758·46	13,650·88
76	81	2,860·47	9,892·42
77	82	2,134·77	7,031·95
78	83	1,560·18	4,897·18
79	84	1,115·09	3,337·00
80	85	778·293	2,221·912
81	86	529·703	1,443·619
82	87	351·009	913·916
83	88	226·110	562·907
84	89	141·362	336·797
85	90	85·6312	195·4350
86	91	50·1735	109·8038
87	92	28·3852	59·6303
88	93	15·4774	31·2451
89	94	8·1186	15·7677
90	95	4·0890	7·6491
91	96	1·9735	3·5601
92	97	·9109	1·5866
93	98	·4013	·6757
94	99	·1684	·2744
95	100	·0671	·1060
96	101	·0254	·0389
97	102	·0091	·0135
98	103	·0031	·0044
99	104	·0010	·0013
100	105	·0003	·0003

Ages		$D_{x,\,y}$	$N_{x,\,y}$
		Female 102 Years older.	
0	102	55·3246	98·4617
1	103	24·9779	43·1371
2	104	12·2109	18·1592
3	105	5·9483	5·9483

JOINT LIVES :—Male and Female Life.

Female 6 Years older than Male.

Female 101 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 6 Years older.**		x	y	**Female 6 Years older.**	
0	6	1,693,416	27,231,239	55	61	68,697·1	597,676·7
1	7	1,360,617	25,537,823	56	62	63,051·2	528,979·6
2	8	1,224,829	24,177,206	57	63	57,661·0	465,928·4
3	9	1,138,133	22,952,377	58	64	52,522·3	408,267·4
4	10	1,071,492	21,814,244	59	65	47,631·8	355,745·1
5	11	1,015,767	20,742,752	60	66	42,987·0	308,113·3
6	12	967,569	19,726,985	61	67	38,586·9	265,126·3
7	13	924,477	18,759,416	62	68	34,431·8	226,539·4
8	14	884,818	17,834,939	63	69	30,523·1	192,107·6
9	15	848,028	16,950,121	64	70	26,863·2	161,584·5
10	16	813,468	16,102,093	65	71	23,455·2	134,721·3
11	17	780,629	15,288,625	66	72	20,302·1	111,266·1
12	18	749,115	14,507,996	67	73	17,406·5	90,964·0
13	19	718,628	13,758,881	68	74	14,769·8	73,557·5
14	20	688,950	13,040,253	69	75	12,391·9	58,787·7
15	21	659,936	12,351,303	70	76	10,270·3	46,395·8
16	22	631,801	11,691,367	71	77	8,399·94	36,125·54
17	23	604,455	11,059,566	72	78	6,772·61	27,725·60
18	24	577,838	10,455,111	73	79	5,377·04	20,952·99
19	25	551,919	9,877,273	74	80	4,198·92	15,575·95
20	26	526,682	9,325,354	75	81	3,221·18	11,377·03
21	27	502,133	8,798,672	76	82	2,424·56	8,155·85
22	28	478,548	8,296,539	77	83	1,788·24	5,731·29
23	29	455,900	7,817,991	78	84	1,290·64	3,943·05
24	30	434,165	7,362,091	79	85	910·269	2,652·407
25	31	413,315	6,927,926	80	86	626·449	1,742·138
26	32	393,321	6,514,611	81	87	420·053	1,115·689
27	33	374,155	6,121,290	82	88	274·002	695·636
28	34	355,788	5,747,135	83	89	173·597	421·634
29	35	338,190	5,391,347	84	90	106·648	248·037
30	36	321,333	5,053,157	85	91	63·4246	141·3885
31	37	305,187	4,731,824	86	92	36·4497	77·9639
32	38	289,725	4,426,637	87	93	20·2063	41·5142
33	39	274,919	4,136,912	88	94	10·7854	21·3079
34	40	260,742	3,861,993	89	95	5·5325	10·5225
35	41	247,169	3,601,251	90	96	2·7221	4·9900
36	42	234,173	3,354,082	91	97	1·2821	2·2679
37	43	221,731	3,119,909	92	98	·5769	·9858
38	44	209,820	2,898,178	93	99	·2474	·4089
39	45	198,417	2,688,358	94	100	·1010	·1615
40	46	187,501	2,489,941	95	101	·0391	·0605
41	47	177,053	2,302,440	96	102	·0143	·0214
42	48	167,053	2,125,387	97	103	·0050	·0071
43	49	157,483	1,958,334	98	104	·0016	·0021
44	50	148,326	1,800,851	99	105	·0005	·0005
45	51	139,567	1,652,525			**Female 101 Years older.**	
46	52	131,189	1,512,958				
47	53	123,179	1,381,769				
48	54	115,524	1,258,590				
49	55	108,046	1,143,066				
50	56	100,843	1,035,020	0	101	97·8708	183·8207
51	57	93,914·2	934,177·3	1	102	45·5949	85·9499
52	58	87,210·1	840,263·1	2	103	23·0290	40·3550
53	59	80,773·2	753,053·0	3	104	11·6047	17·3260
54	60	74,603·1	672,279·8	4	105	5·7213	5·7213

JOINT LIVES:—MALE AND FEMALE LIFE.

Female 7 Years older than Male.

Female 100 Years older than Male.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
		Female 7 Years older.	
0	7	1,650,965	26,558,455
1	8	1,328,484	24,907,490
2	9	1,197,585	23,579,006
3	10	1,114,014	22,381,421
4	11	1,049,595	21,267,407
5	12	995,504	20,217,812
6	13	948,505	19,222,308
7	14	906,292	18,273,803
8	15	867,277	17,367,511
9	16	830,951	16,500,234
10	17	796,726	15,669,283
11	18	764,136	14,872,557
12	19	732,823	14,108,421
13	20	702,517	13,375,598
14	21	673,029	12,673,081
15	22	644,541	12,000,052
16	23	616,928	11,355,511
17	24	590,102	10,738,583
18	25	564,002	10,148,481
19	26	538,595	9,584,479
20	27	513,867	9,045,884
21	28	489,820	8,532,017
22	29	466,723	8,042,197
23	30	444,549	7,575,474
24	31	423,273	7,130,925
25	32	402,867	6,707,652
26	33	383,303	6,304,785
27	34	364,551	5,921,482
28	35	346,583	5,556,931
29	36	329,370	5,210,348
30	37	312,883	4,880,978
31	38	297,094	4,568,095
32	39	281,974	4,271,001
33	40	267,498	3,989,027
34	41	253,637	3,721,529
35	42	240,367	3,467,892
36	43	227,664	3,227,525
37	44	215,502	2,999,861
38	45	203,860	2,784,359
39	46	192,717	2,580,499
40	47	182,050	2,387,782
41	48	171,842	2,205,732
42	49	162,072	2,033,890
43	50	152,724	1,871,818
44	51	143,781	1,719,094
45	52	135,227	1,575,313
46	53	127,048	1,440,086
47	54	119,231	1,313,038
48	55	111,590	1,193,807
49	56	104,228	1,082,217
50	57	97,143·1	977,988·8
51	58	90,335·1	880,845·7
52	59	83,753·3	790,510·6
53	60	77,437·9	706,757·3
54	61	71,387·8	629,319·4
55	62	65,600·3	557,931·6
56	63	60,071·7	492,331·3
57	64	54,798·1	432,259·6
58	65	49,776·0	377,461·5
59	66	45,003·0	327,685·5
60	67	40,477·6	282,682·5
61	68	36,199·7	242,204·9
62	69	32,170·2	206,005·2
63	70	28,391·2	173,835·0
64	71	24,865·5	145,443·8
65	72	21,595·9	120,578·3
66	73	18,585·0	98,982·4
67	74	15,834·8	80,397·4
68	75	13,345·4	64,562·6
69	76	11,115·2	51,217·2
70	77	9,139·93	40,101·96
71	78	7,412·38	30,962·03
72	79	5,922·34	23,549·65
73	80	4,656·49	17,627·31
74	81	3,598·67	12,970·82
75	82	2,730·29	9,372·15
76	83	2,030·99	6,641·86
77	84	1,479·31	4,610·87
78	85	1,053·58	3,131·56
79	86	732·676	2,077·984
80	87	496·771	1,345·308
81	88	327·898	848·537
82	89	210·366	520·639
83	90	130·968	310·273
84	91	78·9915	179·3049
85	92	46·0762	100·3134
86	93	25·9470	54·2372
87	94	14·0807	28·2902
88	95	7·3498	14·2095
89	96	3·6831	6·8597
90	97	1·7684	3·1766
91	98	·8119	1·4082
92	99	·3557	·5963
93	100	·1484	·2406
94	101	·0588	·0922
95	102	·0221	·0334
96	103	·0079	·0113
97	104	·0026	·0034
98	105	·0008	·0008
		Female 100 Years older.	
0	100	167·993	329·274
1	101	80·6587	161·2805
2	102	42·0373	80·6218
3	103	21·8858	38·5845
4	104	11·1618	16·6987
5	105	5·5369	5·5369

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 8 Years older than Male.

Female 99 Years older than Male.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Female 8 Years older.**	
0	8	1,611,976	25,902,434
1	9	1,298,934	24,290,458
2	10	1,172,206	22,991,524
3	11	1,091,248	21,819,318
4	12	1,028,656	20,728,070
5	13	975,890	19,699,414
6	14	929,847	18,723,524
7	15	888,325	17,793,677
8	16	849,812	16,905,352
9	17	813,850	16,055,540
10	18	779,893	15,241,690
11	19	747,517	14,461,797
12	20	716,393	13,714,280
13	21	686,282	12,997,887
14	22	657,328	12,311,605
15	23	629,369	11,654,277
16	24	602,279	11,024,908
17	25	575,972	10,422,629
18	26	550,387	9,846,657
19	27	525,490	9,296,270
20	28	501,266	8,770,780
21	29	477,717	8,269,514
22	30	455,103	7,791,797
23	31	433,397	7,336,694
24	32	412,574	6,903,297
25	33	392,606	6,490,723
26	34	373,464	6,098,117
27	35	355,120	5,724,653
28	36	337,545	5,369,533
29	37	320,709	5,031,988
30	38	304,586	4,711,279
31	39	289,146	4,406,693
32	40	274,363	4,117,547
33	41	260,208	3,843,184
34	42	246,658	3,582,976
35	43	233,686	3,336,318
36	44	221,268	3,102,632
37	45	209,382	2,881,364
38	46	198,004	2,671,982
39	47	187,114	2,473,978
40	48	176,692	2,286,864
41	49	166,718	2,110,172
42	50	157,174	1,943,454
43	51	148,044	1,786,280
44	52	139,311	1,638,236
45	53	130,959	1,498,925
46	54	122,976	1,367,966
47	55	115,170	1,244,990
48	56	107,646	1,129,820
49	57	100,404	1,022,174
50	58	93,441·0	921,770·2
51	59	86,754·4	828,329·2
52	60	80,294·9	741,574·8
53	61	74,100·4	661,279·9
54	62	68,169·8	587,179·5
55	63	62,500·4	519,009·7
56	64	57,089·1	456,509·3
57	65	51,932·8	399,420·2
58	66	47,028·9	347,487·4
59	67	42,376·0	300,458·5
60	68	37,973·4	258,082·5
61	69	33,822·0	220,109·1
62	70	29,923·3	186,287·1
63	71	26,279·9	156,363·8
64	72	22,894·3	130,083·9
65	73	19,769·4	107,189·6
66	74	16,907·0	87,420·2
67	75	14,307·7	70,513·2
68	76	11,970·5	56,205·5
69	77	9,891·85	44,234·99
70	78	8,065·37	34,343·14
71	79	6,481·79	26,277·77
72	80	5,128·71	19,795·98
73	81	3,990·83	14,667·27
74	82	3,050·26	10,676·44
75	83	2,287·09	7,626·18
76	84	1,680·12	5,339·09
77	85	1,207·58	3,658·97
78	86	848·024	2,451·393
79	87	581·009	1,603·369
80	88	387·785	1,022·360
81	89	251·745	634·575
82	90	158·708	382·830
83	91	97·0041	224·1223
84	92	57·3852	127·1182
85	93	32·7998	69·7330
86	94	18·0811	36·9332
87	95	9·5954	18·8521
88	96	4·8928	9·2567
89	97	2·3927	4·3639
90	98	1·1198	1 9712
91	99	·5006	·8514
92	100	·2133	·3508
93	101	·0865	·1375
94	102	·0333	·0510
95	103	·0121	·0177
96	104	·0042	·0056
97	105	·0014	·0014
		Female 99 Years older.	
0	99	280·125	570·124
1	100	138·449	289·999
2	101	74·3652	151·5497
3	102	39·9505	77·1845
4	103	21·0504	37·2340
5	104	10·8021	16·1836
6	105	5·3815	5·3815

JOINT LIVES:—MALE AND FEMALE LIFE.

Female 9 Years older than Male.

Female 98 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 9 Years older.**	
0	9	1,576,120	25,260,762
1	10	1,271,408	23,684,642
2	11	1,148,251	22,413,234
3	12	1,069,478	21,264,983
4	13	1,008,389	20,195,505
5	14	956,694	19,187,116
6	15	911,414	18,230,422
7	16	870,437	17,319,008
8	17	832,323	16,448,571
9	18	796,655	15,616,248
10	19	762,931	14,819,593
11	20	730,758	14,056,662
12	21	699,838	13,325,904
13	22	670,272	12,626,066
14	23	641,855	11,955,794
15	24	614,424	11,313,939
16	25	587,857	10,699,515
17	26	562,068	10,111,658
18	27	536,995	9,549,590
19	28	512,604	9,012,595
20	29	488,880	8,499,991
21	30	465,823	8,011,111
22	31	443,686	7,545,288
23	32	422,442	7,101,602
24	33	402,066	6,679,160
25	34	382,529	6,277,094
26	35	363,802	5,894,565
27	36	345,859	5,530,763
28	37	328,669	5,184,904
29	38	312,205	4,856,235
30	39	296,438	4,544,030
31	40	281,341	4,247,592
32	41	266,886	3,966,251
33	42	253,048	3,699,365
34	43	239,802	3,446,317
35	44	227,121	3,206,515
36	45	214,984	2,979,394
37	46	203,366	2,764,410
38	47	192,247	2,561,044
39	48	181,606	2,368,797
40	49	171,423	2,187,191
41	50	161,680	2,015,768
42	51	152,358	1,854,088
43	52	143,441	1,701,730
44	53	134,914	1,558,289
45	54	126,761	1,423,375
46	55	118,788	1,296,614
47	56	111,100	1,177,826
48	57	103,697	1,066,726
49	58	96,577·5	963,028·7
50	59	89,737·2	866,451·2
51	60	83,172·1	776,714·0
52	61	76,834·3	693,541·9
53	62	70,760·1	616,707·6
54	63	64,948·5	545,947·5
55	64	59,397·2	480,999·0
56	65	54,104·1	421,601·8
57	66	49,066·7	367,497·7
58	67	44,283·6	318,431·0
59	68	39,754·4	274,147·4
60	69	35,479·3	234,393·0
61	70	31,459·8	198,913·7
62	71	27,698·0	167,453·9
63	72	24,196·6	139,755·9
64	73	20,958·0	115,559·3
65	74	17,984·4	94,601·3
66	75	15,276·5	76,616·9
67	76	12,833·7	61,340·4
68	77	10,653·0	48,506·7
69	78	8,728·89	37,853·68
70	79	7,052·80	29,124·79
71	80	5,613·19	22,071·99
72	81	4,395·55	16,458·80
73	82	3,382·66	12,063·25
74	83	2,555·12	8,680·59
75	84	1,891·98	6,125·47
76	85	1,371·51	4,233·49
77	86	971·984	2,861·975
78	87	672·479	1,889·991
79	88	453·542	1,217·512
80	89	297·723	763·970
81	90	189·926	466·247
82	91	117·550	276·321
83	92	70·4709	158·7711
84	93	40·8501	88·3002
85	94	22·8564	47·4501
86	95	12·3215	24·5937
87	96	6·3878	12·2722
88	97	3·1786	5·8844
89	98	1·5152	2·7058
90	99	·6905	1·1906
91	100	·3002	·5001
92	101	·1243	·1999
93	102	·0489	·0756
94	103	·0182	·0267
95	104	·0064	·0085
96	105	·0021	·0021

Female 98 Years older.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
0	98	454·299	958·021
1	99	230·861	503·722
2	100	127·646	272·861
3	101	70·6735	145·2151
4	102	38·4256	74·5416
5	103	20·3719	36·1160
6	104	10·4989	15·7441
7	105	5·2452	5·2452

JOINT LIVES:—MALE AND FEMALE LIFE.

Female 10 Years older than Male.

Female 97 Years older than Male.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Female 10 Years older.**	
0	10	1,542,720	24,631,144
1	11	1,245,425	23,088,424
2	12	1,125,344	21,842,999
3	13	1,048,407	20,717,655
4	14	988,554	19,669,248
5	15	937,728	18,680,694
6	16	893,060	17,742,966
7	17	852,522	16,849,906
8	18	814,738	15,997,384
9	19	779,328	15,182,646
10	20	745,827	14,403,318
11	21	713,870	13,657,491
12	22	683,511	12,943,621
13	23	654,494	12,260,110
14	24	626,614	11,605,616
15	25	599,711	10,979,002
16	26	573,666	10,379,291
17	27	548,391	9,805,625
18	28	523,827	9,257,234
19	29	499,938	8,733,407
20	30	476,708	8,233,469
21	31	454,137	7,756,761
22	32	432,471	7,302,624
23	33	411,682	6,870,153
24	34	391,745	6,458,471
25	35	372,632	6,066,726
26	36	354,315	5,694,094
27	37	336,764	5,339,779
28	38	319,953	5,003,015
29	39	303,852	4,683,062
30	40	288,435	4,379,210
31	41	273,674	4,090,775
32	42	259,542	3,817,101
33	43	246,014	3,557,559
34	44	233,065	3,311,545
35	45	220,671	3,078,480
36	46	208,808	2,857,809
37	47	197,454	2,649,001
38	48	186,589	2,451,547
39	49	176,191	2,264,958
40	50	166,243	2,088,767
41	51	156,725	1,922,524
42	52	147,621	1,765,799
43	53	138,914	1,618,178
44	54	130,589	1,479,264
45	55	122,445	1,348,675
46	56	114,590	1,226,230
47	57	107,024	1,111,640
48	58	99,745·3	1,004,615·7
49	59	92,749·4	904,870·4
50	60	86,031·7	812,121·0
51	61	79,587·5	726,089·3
52	62	73,370·8	646,501·8
53	63	67,416·4	573,131·0
54	64	61,723·7	505,714·6

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Female 10 Years older.**	
55	65	56,291·5	443,990·9
56	66	51,118·1	387,699·4
57	67	46,202·4	336,581·3
58	68	41,544·0	290,378·9
59	69	37,143·2	248,834·9
60	70	33,001·3	211,691·7
61	71	29,120·2	178,690·4
62	72	25,502·3	149,570·2
63	73	22,150·1	124,067·9
64	74	19,065·7	101,917·8
65	75	16,250·0	82,852·1
66	76	13,702·7	66,602·1
67	77	11,421·2	52,899·4
68	78	9,400·57	41,478·21
69	79	7,633·01	32,077·64
70	80	6,107·68	24,444·63
71	81	4,810·77	18,336·95
72	82	3,725·70	13,526·18
73	83	2,833·56	9,800·48
74	84	2,113·71	6,966·92
75	85	1,544·46	4,853·21
76	86	1,103·93	3,308·75
77	87	770·780	2,204·822
78	88	524·944	1,434·042
79	89	348·209	909·098
80	90	224·614	560·889
81	91	140·672	336·275
82	92	85·3972	195·6032
83	93	50·1653	110·2060
84	94	28·4663	60·0407
85	95	15·5757	31·5744
86	96	8·2026	15·9987
87	97	4·1498	7·7961
88	98	2·0129	3·6463
89	99	·9343	1·6334
90	100	·4141	·6991
91	101	·1749	·2850
92	102	·0703	·1101
93	103	·0268	·0398
94	104	·0097	·0130
95	105	·0033	·0033

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Female 97 Years older.**	
0	97	717·393	1,566·271
1	98	374·403	848·878
2	99	212·848	474·475
3	100	121·310	261·627
4	101	67·9759	140·3172
5	102	37·1871	72·3413
6	103	19·8003	35·1542
7	104	10·2330	15·3539
8	105	5·1209	5·1209

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 11 Years older than Male.

Female 96 Years older than Male.

Ages		$D_{x, y}$	$N_{x, y}$	Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Female 11 Years older.**		x	y	**Female 11 Years older.**	
0	11	1,511,193	24,011,816	55	66	53,184·8	408,081·1
1	12	1,220,580	22,500,623	56	67	48,134·1	354,896·3
2	13	1,103,172	21,280,043	57	68	43,344·1	306,762·2
3	14	1,027,784	20,176,871	58	69	38,815·3	263,418·1
4	15	968,956	19,149,087	59	70	34,549·0	224,602·8
5	16	918,844	18,180,131	60	71	30,547·1	190,053·8
6	17	874,680	17,261,287	61	72	26,811·8	159,506·7
7	18	834,511	16,386,607	62	73	23,345·5	132,694·9
8	19	797,018	15,552,096	63	74	20,150·2	109,349·4
9	20	761,856	14,755,078	64	75	17,227·0	89,199·2
10	21	728,591	13,993,222	65	76	14,575·9	71,972·2
11	22	697,217	13,264,631	66	77	12,194·5	57,396·3
12	23	667,421	12,567,414	67	78	10,078·4	45,201·8
13	24	638,953	11,899,993	68	79	8,220·37	35,123·36
14	25	611,609	11,261,040	69	80	6,610·15	26,902·99
15	26	585,234	10,649,431	70	81	5,234·57	20,292·84
16	27	559,708	10,064,197	71	82	4,077·65	15,058·27
17	28	534,944	9,504,489	72	83	3,120·92	10,980·62
18	29	510,883	8,969,545	73	84	2,344·05	7,859·70
19	30	487,490	8,458,662	74	85	1,725·46	5,515·65
20	31	464,749	7,971,172	75	86	1,243·14	3,790·19
21	32	442,658	7,506,423	76	87	875·411	2,547·051
22	33	421,455	7,063,765	77	88	601·679	1,671·640
23	34	401,115	6,642,310	78	89	403·028	1,069·961
24	35	381,611	6,241,195	79	90	262·701	666·933
25	36	362,914	5,859,584	80	91	166·365	404·232
26	37	344,998	5,496,670	81	92	102·195	237·867
27	38	327,834	5,151,672	82	93	60·7907	135·6718
28	39	311,393	4,823,838	83	94	34·9575	74·8811
29	40	295,650	4,512,445	84	95	19·3986	39·9236
30	41	280,575	4,216,795	85	96	10·3690	20·5250
31	42	266,143	3,936,220	86	97	5·3287	10·1560
32	43	252,328	3,670,077	87	98	2·6279	4·8273
33	44	239,103	3,417,749	88	99	1·2412	2·1994
34	45	226,446	3,178,646	89	100	·5603	·9582
35	46	214,331	2,952,200	90	101	·2413	·3979
36	47	202,737	2,737,869	91	102	·0989	·1566
37	48	191,642	2,535,132	92	103	·0385	·0577
38	49	181,025	2,343,490	93	104	·0142	·0192
39	50	170,867	2,162,465	94	105	·0050	·0050
40	51	161,148	1,991,598				
41	52	151,852	1,830,450				
42	53	142,962	1,678,598			**Female 96 Years older.**	
43	54	134,461	1,535,636				
44	55	126,142	1,401,175				
45	56	118,117	1,275,033	0	96	1,104·29	2,495·89
46	57	110,386	1,156,916	1	97	591·228	1,391·603
47	58	102,945	1,046,530	2	98	345·190	800·375
48	59	95,791·6	943,585·1	3	99	202·281	455·185
49	60	88,919·5	847,793·5	4	100	116·679	252·904
50	61	82,323·9	758,874·0	5	101	65·7851	136·2251
51	62	75,999·9	676,550·1	6	102	36·1436	70·4400
52	63	69,903·7	600,550·2	7	103	19·2987	34·2964
53	64	64,069·1	530,646·5	8	104	9·9905	14·9977
54	65	58,496·3	466,577·4	9	105	5·0072	5·0072

JOINT LIVES:—MALE AND FEMALE LIFE.

Female 12 Years older than Male.

Female 95 Years older than Male.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
		Female 12 Years older.	
0	12	1,481,046	23,401,446
1	13	1,196,531	21,920,400
2	14	1,081,472	20,723,869
3	15	1,007,409	19,642,397
4	16	949,444	18,634,988
5	17	899,934	17,685,544
6	18	856,200	16,785,610
7	19	816,361	15,929,410
8	20	779,149	15,113,049
9	21	744,251	14,333,900
10	22	711,594	13,589,649
11	23	680,804	12,878,055
12	24	651,573	12,197,251
13	25	623,653	11,545,678
14	26	596,845	10,922,025
15	27	570,994	10,325,180
16	28	545,983	9,754,186
17	29	521,725	9,208,203
18	30	498,163	8,686,478
19	31	475,261	8,188,315
20	32	453,001	7,713,054
21	33	431,383	7,260,053
22	34	410,637	6,828,670
23	35	390,738	6,418,033
24	36	371,658	6,027,295
25	37	353,371	5,655,637
26	38	335,849	5,302,266
27	39	319,063	4,966,417
28	40	302,987	4,647,354
29	41	287,593	4,344,367
30	42	272,855	4,056,774
31	43	258,745	3,783,919
32	44	245,240	3,525,174
33	45	232,312	3,279,934
34	46	219,940	3,047,622
35	47	208,100	2,827,682
36	48	196,769	2,619,582
37	49	185,928	2,422,813
38	50	175,554	2,236,885
39	51	165,631	2,061,331
40	52	156,138	1,895,700
41	53	147,059	1,739,562
42	54	138,379	1,592,503
43	55	129,882	1,454,124
44	56	121,684	1,324,242
45	57	113,784	1,202,558
46	58	106,179	1,088,774
47	59	98,864·9	982,595·3
48	60	91,836·1	883,730·4
49	61	85,087·2	791,894·3
50	62	78,612·9	706,807·1
51	63	72,408·5	628,194·2
52	64	66,432·9	555,785·7
53	65	60,719·1	489,352·8
54	66	55,268·0	428,633·7
55	67	50,080·2	373,365·7
56	68	45,156·3	323,285·5
57	69	40,497·2	278,129·2
58	70	36,104·3	237,632·0
59	71	31,979·7	201,527·7
60	72	28,125·5	169,548·0
61	73	24,544·1	141,422·5
62	74	21,237·5	116,878·4
63	75	18,206·9	95,640·9
64	76	15,452·3	77,434·0
65	77	12,971·6	61,981·7
66	78	10,760·8	49,010·1
67	79	8,813·11	38,249·25
68	80	7,118·79	29,436·14
69	81	5,665·21	22,317·35
70	82	4,436·87	16,652·14
71	83	3,415·74	12,215·27
72	84	2,581·76	8,799·53
73	85	1,913·49	6,217·77
74	86	1,388·82	4,304·28
75	87	985·802	2,915·458
76	88	683·355	1,929·656
77	89	461·942	1,246·301
78	90	304·059	784·359
79	91	194·575	480·300
80	92	120·859	285·725
81	93	72·7482	164·8660
82	94	42·3618	92·1178
83	95	23·8221	49·7560
84	96	12·9139	25·9339
85	97	6·7361	13·0200
86	98	3·3745	6·2839
87	99	1·6204	2·9094
88	100	·7443	1·2890
89	101	·3264	·5447
90	102	·1364	·2183
91	103	·0542	·0819
92	104	·0204	·0277
93	105	·0073	·0073
		Female 95 Years older.	
0	95	1,658·81	3,882·20
1	96	910·084	2,223·393
2	97	545·097	1,313·309
3	98	328·054	768·212
4	99	194·560	440·158
5	100	112·919	245·598
6	101	63·9391	132·6792
7	102	35·2280	68·7401
8	103	18·8414	33·5121
9	104	9·7688	14·6707
10	105	4·9019	4·9019

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 13 Years older than Male.

Female 94 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 13 Years older.**	
0	13	1,451,865	22,799,090
1	14	1,172,995	21,347,225
2	15	1,060,032	20,174,230
3	16	987,122	19,114,198
4	17	929,904	18,127,076
5	18	880,920	17,197,172
6	19	837,579	16,316,252
7	20	798,059	15,478,673
8	21	761,144	14,680,614
9	22	726,888	13,919,470
10	23	694,843	13,192,582
11	24	664,638	12,497,739
12	25	635,971	11,833,101
13	26	608,598	11,197,130
14	27	582,322	10,588,532
15	28	556,992	10,006,210
16	29	532,492	9,449,218
17	30	508,736	8,916,726
18	31	485,666	8,407,990
19	32	463,248	7,922,324
20	33	441,463	7,459,076
21	34	420,310	7,017,613
22	35	400,014	6,597,303
23	36	380,548	6,197,289
24	37	361,886	5,816,741
25	38	344,000	5,454,855
26	39	326,864	5,110,855
27	40	310,450	4,783,991
28	41	294,731	4,473,541
29	42	279,680	4,178,810
30	43	265,270	3,899,130
31	44	251,477	3,633,860
32	45	238,274	3,382,383
33	46	225,638	3,144,109
34	47	213,546	2,918,471
35	48	201,974	2,704,925
36	49	190,902	2,502,951
37	50	180,309	2,312,049
38	51	170,175	2,131,740
39	52	160,481	1,961,565
40	53	151,210	1,801,084
41	54	142,345	1,649,874
42	55	133,666	1,507,529
43	56	125,291	1,373,863
44	57	117,220	1,248,572
45	58	109,447	1,131,352
46	59	101,970	1,021,905
47	60	94,782·5	919,934·8
48	61	87,878·1	825,152·3
49	62	81,251·7	737,274·2
50	63	74,898·1	656,022·5
51	64	68,813·4	581,124·4
52	65	62,959·3	512,311·0
53	66	57,368·1	449,351·7
54	67	52,041·7	391,983·6
55	68	46,981·9	339,941·9
56	69	42,190·3	292,960·0
57	70	37,668·7	250,769·7
58	71	33,419·4	213,101·0
59	72	29,444·6	179,681·6
60	73	25,746·8	150,237·0
61	74	22,328·0	124,490·2
62	75	19,189·5	102,162·2
63	76	16,331·2	82,972·7
64	77	13,751·5	66,641·5
65	78	11,446·6	52,890·0
66	79	9,409·85	41,443·44
67	80	7,632·11	32,033·59
68	81	6,101·14	24,401·48
69	82	4,801·88	18,300·34
70	83	3,716·64	13,498·46
71	84	2,825·64	9,781·82
72	85	2,107·54	6,956·18
73	86	1,540·17	4,848·64
74	87	1,101·33	3,308·47
75	88	769·527	2,207·139
76	89	524·649	1,437·612
77	90	348·506	912·963
78	91	225·208	564·457
79	92	141·354	339·249
80	93	86·0350	197·8954
81	94	50·6943	111·8604
82	95	28·8678	61·1661
83	96	15·8587	32·2983
84	97	8·3894	16·4396
85	98	4·2657	8·0502
86	99	2·0807	3·7845
87	100	·9718	1·7038
88	101	·4336	·7320
89	102	·1845	·2984
90	103	·0747	·1139
91	104	·0287	·0392
92	105	·0105	·0105

Female 94 Years older.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
0	94	2,434·20	5,901·47
1	95	1,367·08	3,467·27
2	96	839·075	2,100·186
3	97	518·037	1,261·111
4	98	315·532	743·074
5	99	188·290	427·542
6	100	109·750	239·252
7	101	62·3193	129·5018
8	102	34·3933	67·1825
9	103	18·4232	32·7892
10	104	9·5632	14·3660
11	105	4·8028	4·8028

JOINT LIVES:—MALE AND FEMALE LIFE.

Female 14 Years older than Male.

Female 93 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 14 Years older.**	
0	14	1,423,307	22,204,126
1	15	1,149,741	20,780,819
2	16	1,038,686	19,631,078
3	17	966,807	18,592,392
4	18	910,257	17,625,585
5	19	861,761	16,715,328
6	20	818,801	15,853,567
7	21	779,616	15,034,766
8	22	743,387	14.255,150
9	23	709,777	13,511,763
10	24	678.344	12,801,986
11	25	648,723	12,123,642
12	26	620,619	11,474,919
13	27	593,789	10,854,300
14	28	568,043	10,260,511
15	29	543,229	9,692,468
16	30	519,234	9,149,239
17	31	495,973	8,630,005
18	32	473,390	8,134,032
19	33	451,448	7,660,642
20	34	430,131	7,209,194
21	35	409,436	6,779,063
22	36	389,582	6,369,627
23	37	370,541	5,980,045
24	38	352,289	5,609,504
25	39	334,798	5,257,215
26	40	318,041	4,922,417
27	41	301,990	4,604,376
28	42	286,621	4,302,386
29	43	271,906	4,015,765
30	44	257,818	3,743,859
31	45	244,334	3,486,041
32	46	231,429	3,241,707
33	47	219,079	3,010,278
34	48	207,260	2,791,199
35	49	195,952	2,583,939
36	50	185,133	2,387,987
37	51	174,784	2,202,854
38	52	164,884	2,028,070
39	53	155,416	1,863,186
40	54	146,363	1,707.770
41	55	137,498	1,561,407
42	56	128,942	1,423,909
43	57	120,695	1,294,967
44	58	112,752	1,174,272
45	59	105,109	1,061,520
46	60	97,759·7	956,410·9
47	61	90,697·5	858,651·2
48	62	83,916·8	767,953·7
49	63	77,412·1	684,036·9
50	64	71,179·3	606,624·8
51	65	65,215·3	535,445·5
52	66	59,484·6	470,230·2
53	67	54,019·2	410,745·6
54	68	48,822·1	356,726·4

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 14 Years older.**	
55	69	43,896·1	307,904·3
56	70	39,243·6	264,008·2
57	71	34,867·4	224,764·6
58	72	30,770·1	189,897·2
59	73	26,954·3	159,127·1
60	74	23,422·1	132,172·8
61	75	20,174·7	108,750·7
62	76	17,212·5	88,576·0
63	77	14,533·7	71,363·5
64	78	12,134·8	56,829·8
65	79	10,009·5	44,695·0
66	80	8,148·88	34,685·51
67	81	6,541·08	26,536·63
68	82	5,171·38	19,995·55
69	83	4,022·40	14,824·17
70	84	3,074·57	10,801·77
71	85	2,306·62	7,727·20
72	86	1,696·36	5,420·58
73	87	1,221·35	3,724·22
74	88	859·709	2,502·869
75	89	590·808	1,643·160
76	90	395·815	1,052·352
77	91	258·128	656·537
78	92	163·608	398·409
79	93	100·624	234·801
80	94	59·9532	134·1768
81	95	34·5460	74·2236
82	96	19·2177	39·6776
83	97	10·3025	20·4599
84	98	5·3127	10·1574
85	99	2·6303	4·8447
86	100	1·2478	2·2144
87	101	·5661	·9666
88	102	·2451	·4005
89	103	·1011	·1554
90	104	·0396	·0543
91	105	·0147	·0147

Female 93 Years older.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
0	93	3,493·17	8,777·30
1	94	2,006·11	5,284·13
2	95	1,260·41	3,278·02
3	96	797·420	2,017·610
4	97	498·264	1,220·190
5	98	305·363	721·926
6	99	183·006	416·563
7	100	106·970	233·557
8	101	60·8427	126·5867
9	102	33·6300	65·7440
10	103	18·0356	32·1140
11	104	9·3700	14·0784
12	105	4·7084	4·7084

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 15 Years older than Male.

Female 92 Years older than Male.

Female 15 Years older.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
0	15	1,395,090	21,616,211
1	16	1,126,588	20,221,121
2	17	1,017,309	19,094,533
3	18	946,380	18,077,224
4	19	890,460	17,130,844
5	20	842,441	16,240,384
6	21	799,879	15,397,943
7	22	761,428	14,598,064
8	23	725,888	13,836,636
9	24	692,923	13,110,748
10	25	662,101	12,417,825
11	26	633,063	11,755,724
12	27	605,518	11,122,661
13	28	579,229	10,517,143
14	29	554,007	9,937,914
15	30	529,704	9,383,907
16	31	506,208	8,854,203
17	32	483,437	8,347,995
18	33	461,332	7,864,558
19	34	439,861	7,403,226
20	35	419,004	6,963,365
21	36	398,759	6,544,361
22	37	379,338	6,145,602
23	38	360,715	5,766,264
24	39	342,864	5,405,549
25	40	325,760	5,062,685
26	41	309,374	4,736,925
27	42	293,681	4,427,551
28	43	278,654	4,133,870
29	44	264,267	3,855,216
30	45	250,496	3,590,949
31	46	237,315	3,340,453
32	47	224,701	3,103,138
33	48	212,630	2,878,437
34	49	201,080	2,665,807
35	50	190,030	2,464,727
36	51	179,460	2,274,697
37	52	169,349	2,095,237
38	53	159,680	1,925,888
39	54	150,434	1,766,208
40	55	141,379	1,615,774
41	56	132,638	1,474,395
42	57	124,212	1,341,757
43	58	116,095	1,217,545
44	59	108,283	1,101,450
45	60	100,769	993,167
46	61	93,546·4	892,397·7
47	62	86,609·1	798,851·3
48	63	79,951·3	712,242·2
49	64	73,568·6	632,290·9
50	65	67,457·5	558,722·3
51	66	61,616·1	491,264·8
52	67	56,012·2	429,648·7
53	68	50,677·3	373,636·5
54	69	45,615·4	322,959·2
55	70	40,830·2	277,343·8
56	71	36,325·2	236,513·6
57	72	32,103·4	200,188·4
58	73	28,167·7	168,085·0
59	74	24,520·5	139,917·3
60	75	21,163·3	115,396·8
61	76	18,096·3	94,233·5
62	77	15,318·0	76,137·2
63	78	12,825·0	60,819·2
64	79	10,611·3	47,994·2
65	80	8,668·17	37,382·88
66	81	6,983·97	28,714·71
67	82	5,544·27	21,730·74
68	83	4,331·93	16,186·47
69	84	3,327·50	11,854·54
70	85	2,509·82	8,527·04
71	86	1,856·60	6,017·22
72	87	1,345·20	4,160·62
73	88	953·395	2,815·415
74	89	660·045	1,862·020
75	90	445·727	1,201·975
76	91	293·169	756·248
77	92	187·523	463·079
78	93	116·466	275·556
79	94	70·1195	159·0901
80	95	40·8555	88·9706
81	96	22·9978	48·1151
82	97	12·4846	25·1173
83	98	6·5242	12·6327
84	99	3·2759	6·1085
85	100	1·5774	2·8326
86	101	·7270	1·2552
87	102	·3200	·5282
88	103	·1343	·2082
89	104	·0536	·0739
90	105	·0203	·0203

Female 92 Years older.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
0	92	4,907·11	12,786·05
1	93	2,878·84	7,878·94
2	94	1,849·58	5,000·10
3	95	1,197·84	3,150·52
4	96	766·983	1,952·676
5	97	482·205	1,185·693
6	98	296·794	703·488
7	99	178·370	406·694
8	100	104·435	228·324
9	101	59·4924	123·8890
10	102	32·9224	64·3966
11	103	17·6712	31·4742
12	104	9·1858	13·8030
13	105	4·6172	4·6172

JOINT LIVES:—MALE AND FEMALE LIFE.

Female 16 Years older than Male.
Female 91 Years older than Male.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Female 16 Years older.**	
0	16	1,366,997	21,035,266
1	17	1,103,402	19,668,269
2	18	995,816	18,564,867
3	19	925,797	17,569,051
4	20	870,496	16,643,254
5	21	822,973	15,772,758
6	22	781,219	14,949,785
7	23	743,540	14,168,566
8	24	708,651	13,425,026
9	25	676,331	12,716,375
10	26	646,117	12,040,044
11	27	617,659	11,393,927
12	28	590,669	10,776,268
13	29	564,916	10,185,599
14	30	540,213	9,620,683
15	31	516,416	9,080,470
16	32	493,413	8,564,054
17	33	471,123	8,070,641
18	34	449,491	7,599,518
19	35	428,481	7,150,027
20	36	408,076	6,721,546
21	37	388,273	6,313,470
22	38	369,278	5,925,197
23	39	351,065	5,555,919
24	40	333,609	5,204,854
25	41	316,883	4,871,245
26	42	300,861	4,554,362
27	43	285,517	4,253,501
28	44	270,826	3,967,984
29	45	256,761	3,697,158
30	46	243,300	3,440,397
31	47	230,416	3,197,097
32	48	218,087	2,966,681
33	49	206,290	2,748,594
34	50	195,004	2,542,304
35	51	184,207	2,347,300
36	52	173,880	2,163,093
37	53	164,004	1,989,213
38	54	154,561	1,825,209
39	55	145,311	1,670,648
40	56	136,382	1,525,337
41	57	127,772	1,388,955
42	58	119,478	1,261,183
43	59	111,493	1,141,705
44	60	103,812	1,030,212
45	61	96,426·0	926,399·6
46	62	89,329·5	829,973·6
47	63	82,516·4	740,644·1
48	64	75,981·7	658,127·7
49	65	69,721·8	582,146·0
50	66	63,734·6	512,424·2
51	67	58,019·3	448,689·6
52	68	52,547·0	390,670·3
53	69	47,348·7	338,123·3
54	70	42,429·5	290,774·6
55	71	37,793·8	248,345·1
56	72	33,445·6	210,551·3
57	73	29,388·2	177,105·7
58	74	25,624·4	147,717·5
59	75	22,155·8	122,093·1
60	76	18,983·0	99,937·3
61	77	16,104·5	80,954·3
62	78	13,517·1	64,849·8
63	79	11,214·9	51,332·7
64	80	9,189·35	40,117·83
65	81	7,429·03	30,928·48
66	82	5,919·67	23,499·45
67	83	4,644·29	17,579·78
68	84	3,583·55	12,935·49
69	85	2,716·30	9,351·94
70	86	2,020·16	6,635·64
71	87	1,472·28	4,615·48
72	88	1,050·08	3,143·20
73	89	731·973	2,093·120
74	90	497·962	1,361·147
75	91	330·138	863·185
76	92	212·979	533·047
77	93	133·490	320·068
78	94	81·1586	186·5778
79	95	47·7834	105·4192
80	96	27·1981	57·6358
81	97	14·9403	30·4377
82	98	7·9060	15·4974
83	99	4·0229	7·5914
84	100	1·9646	3·5685
85	101	·9190	1·6039
86	102	·4109	·6849
87	103	·1753	·2740
88	104	·0712	·0987
89	105	·0275	·0275
		Female 91 Years older.	
0	91	6,754·70	18,260·75
1	92	4,044·12	11,506·05
2	93	2,654·22	7,461·93
3	94	1,757·76	4,807·71
4	95	1,152·12	3,049·95
5	96	742·264	1,897·833
6	97	468·674	1,155·569
7	98	289·276	686·895
8	99	174·144	397·619
9	100	102·117	223·475
10	101	58·2406	121·3577
11	102	32·2572	63·1171
12	103	17·3239	30·8599
13	104	9·0079	13·5360
14	105	4·5281	4·5281

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 17 Years older than Male.

Female 90 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 17 Years older.**	
0	17	1,338,863	20,461,274
1	18	1,080,090	19,122,411
2	19	974,157	18,042,321
3	20	905,041	17,068,164
4	21	850,380	16,163,123
5	22	803,774	15,312,743
6	23	762,829	14,508,969
7	24	725,849	13,746,140
8	25	691,682	13,020,291
9	26	660,004	12,328,609
10	27	630,396	11,668,605
11	28	602,513	11,038,209
12	29	576,074	10,435,696
13	30	550,851	9,859,622
14	31	526,661	9,308,771
15	32	503,362	8,782,110
16	33	480,845	8,278,748
17	34	459,030	7,797,903
18	35	437,862	7,338,873
19	36	417,306	6,901,011
20	37	397,346	6,483,705
21	38	377,977	6,086,359
22	39	359,399	5,708,382
23	40	341,588	5,348,983
24	41	324,518	5,007,395
25	42	308,163	4,682,877
26	43	292,498	4,374,714
27	44	277,497	4,082,216
28	45	263,134	3,804,719
29	46	249,385	3,541,585
30	47	236,226	3,292,200
31	48	223,633	3,055,974
32	49	211,584	2,832,341
33	50	200,056	2,620,757
34	51	189,028	2,420,701
35	52	178,480	2,231,673
36	53	168,392	2,053,193
37	54	158,747	1,884,801
38	55	149,298	1,726,054
39	56	140,175	1,576,756
40	57	131,379	1,436,581
41	58	122,903	1,305,202
42	59	114,742	1,182,299
43	60	106,890	1,067,557
44	61	99,337·7	960,666·9
45	62	92,079·3	861,329·2
46	63	85,108·3	769,249·9
47	64	78,419·4	684,141·6
48	65	72,008·8	605,722·2
49	66	65,874·0	533,713·4
50	67	60,014·1	467,839·4
51	68	54,429·9	407,825·3
52	69	49,095·6	353,395·4
53	70	44,041·7	304,299·8
54	71	39.274·1	260,258·1
55	72	34,797·8	220,984·0
56	73	30,616·9	186,186·2
57	74	26,734·7	155,569·3
58	75	23,153·2	128,834·6
59	76	19,873·3	105,681·4
60	77	16,893·7	85,808·1
61	78	14,211·2	68,914·4
62	79	11,820·1	54,703·2
63	80	9,712·05	42,883·13
64	81	7,875·71	33,171·08
65	82	6,296·90	25,295·37
66	83	4,958·75	18,998·47
67	84	3,841·51	14,039·72
68	85	2,925·32	10,198·21
69	86	2,186·35	7,272·89
70	87	1,601·98	5,086·54
71	88	1,149·28	3,484·56
72	89	806·204	2,335·281
73	90	552·228	1,529·077
74	91	368·827	976·849
75	92	239·836	608·022
76	93	151·611	368·186
77	94	93·0221	216·5746
78	95	55·3062	123·5525
79	96	31·8101	68·2463
80	97	17·6690	36·4362
81	98	9·4612	18·7672
82	99	4·8749	9·3060
83	100	2·4125	4·4311
84	101	1·1445	2·0186
85	102	·5195	·8741
86	103	·2251	·3546
87	104	·0930	·1295
88	105	·0365	·0365

Female 90 Years older.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
0	90	9,119·70	25,593·02
1	91	5,566·78	16,473·32
2	92	3,728·58	10,906·54
3	93	2,522·45	7,177·96
4	94	1,690·67	4,655·51
5	95	1,114·99	2,964·84
6	96	721·435	1,849·854
7	97	456·801	1,128·419
8	98	282·421	671·618
9	99	170·279	389·197
10	100	99·9688	218·9181
11	101	57·0639	118·9493
12	102	31·6231	61·8854
13	103	16·9883	30·2623
14	104	8·8340	13·2740
15	105	4·4400	4·4400

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 18 Years older than Male.

Female 89 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 18 Years older.**	
0	18	1,310,576	19,894,578
1	19	1,056,599	18,584,002
2	20	952,318	17,527,403
3	21	884,127	16,575,085
4	22	830,541	15,690,958
5	23	784,853	14,860,417
6	24	744,715	14,075,564
7	25	708,469	13,330,849
8	26	674,985	12,622,380
9	27	643,945	11,947,395
10	28	614,938	11,303,450
11	29	587,625	10,688,512
12	30	561,731	10,100,887
13	31	537,032	9,539,156
14	32	513,349	9,002,124
15	33	490,541	8,488,775
16	34	468,503	7,998,234
17	35	447,155	7,529,731
18	36	426,443	7,082,576
19	37	406,333	6,656,133
20	38	386,809	6,249,800
21	39	367,865	5,862,991
22	40	349,697	5,495,126
23	41	332,280	5,145,429
24	42	315,588	4,813,149
25	43	299,597	4,497,561
26	44	284,281	4,197,964
27	45	269,615	3,913,683
28	46	255,574	3,644,068
29	47	242,135	3,388,494
30	48	229,273	3,146,359
31	49	216,965	2,917,086
32	50	205,190	2,700,121
33	51	193,925	2,494,931
34	52	183,151	2,301,006
35	53	172,847	2,117,855
36	54	162,994	1,945,008
37	55	153,341	1,782,014
38	56	144,021	1,628,673
39	57	135,033	1,484,652
40	58	126,372	1,349,619
41	59	118,031	1,223,247
42	60	110,004	1,105,216
43	61	102,283	995,212
44	62	94,859·7	892,929·3
45	63	87,728·2	798,069·6
46	64	80,882·6	710,341·4
47	65	74,319·0	629,458·8
48	66	68,034·7	555,139·8
49	67	62,028·6	487,105·1
50	68	56,301·3	425,076·5
51	69	50,854·8	368,775·2
52	70	45,666·6	317,920·4
53	71	40,766·5	272,253·8
54	72	36,160·8	231,487·3

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 18 Years older.**	
55	73	31,854·7	195,326·5
56	74	27,852·4	163,471·8
57	75	24,156·5	135,619·4
58	76	20,767·9	111,462·9
59	77	17,686·0	90,695·0
60	78	14,907·5	73,009·0
61	79	12,427·0	58,101·5
62	80	10,236·1	45,674·5
63	81	8,323·69	35,438·43
64	82	6,675·51	27,114·74
65	83	5,274·75	20,439·23
66	84	4,102·09	15,164·48
67	85	3,136·25	11,062·39
68	86	2,354·59	7,926·14
69	87	1,733·77	5,571·55
70	88	1,250·52	3,837·78
71	89	882·361	2,587·257
72	90	608·230	1,704·896
73	91	409·019	1,096·666
74	92	267·943	687·647
75	93	170·729	419·704
76	94	105·650	248·975
77	95	63·3906	143·3245
78	96	36·8181	79·9339
79	97	20·6652	43·1158
80	98	11·1892	22·4506
81	99	5·8338	11·2614
82	100	2·9235	5·4276
83	101	1·4055	2·5041
84	102	·6470	1·0986
85	103	·2846	·4516
86	104	·1194	·1670
87	105	·0476	·0476

		Female 89 Years older.	
0	89	12,088·1	35,232·5
1	90	7,515·86	23,144·38
2	91	5,132·43	15,628·52
3	92	3,543·48	10,496·09
4	93	2,426·17	6,952·61
5	94	1,636·18	4,526·44
6	95	1,083·70	2,890·26
7	96	703·159	1,806·561
8	97	445·977	1,103·402
9	98	276·153	657·425
10	99	166·696	381·272
11	100	97·9490	214·5763
12	101	55·9422	116·6273
13	102	31·0106	60·6851
14	103	16·6602	29·6745
15	104	8·6621	13·0143
16	105	4·3522	4·3522

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 19 Years older than Male.

Female 88 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 19 Years older.**	
0	19	1,282,072	19,335,487
1	20	1,032,910	18,053,415
2	21	930,310	17,020,505
3	22	863,501	16,090,195
4	23	810,990	15,226,694
5	24	766,216	14,415,704
6	25	726,883	13,649,488
7	26	691,366	12,922,605
8	27	658,561	12,231,239
9	28	628,154	11,572,678
10	29	599,743	10,944,524
11	30	572,995	10,344,781
12	31	547,639	9,771,786
13	32	523,457	9,224,147
14	33	500,273	8,700,690
15	34	477,950	8,200,417
16	35	456,382	7,722,467
17	36	435,493	7,266,085
18	37	415,230	6,830,592
19	38	395,558	6,415,362
20	39	376,461	6,019,804
21	40	357,934	5,643,343
22	41	340,168	5,285,409
23	42	323,137	4,945,241
24	43	306,816	4,622,104
25	44	291,181	4,315,288
26	45	276,207	4,024,107
27	46	261,870	3,747,900
28	47	248,144	3,486,030
29	48	235,008	3,237,886
30	49	222,437	3,002,878
31	50	210,409	2,780,441
32	51	198,902	2,570,032
33	52	187,896	2,371,130
34	53	177,370	2,183,234
35	54	167,306	2,005,864
36	55	157,444	1,838,558
37	56	147,922	1,681,114
38	57	138,737	1,533,192
39	58	129,887	1,394,455
40	59	121,363	1,264,568
41	60	113,157	1,143,205
42	61	105,263	1,030,048
43	62	97,672·1	924,784·7
44	63	90,377·2	827,112·6
45	64	83,372·4	736,735·4
46	65	76,653·4	653,363·0
47	66	70,217·4	576,709·6
48	67	64,063·2	506,492·2
49	68	58,191·1	442,429·0
50	69	52,603·3	384,237·9
51	70	47,303·0	331,634·6
52	71	42,270·5	284,331·6
53	72	37,534·8	242,061·1
54	73	33,102·4	204,526·3
55	74	28,978·5	171,423·9
56	75	25,166·4	142,445·4
57	76	21,667·8	117,279·0
58	77	18,482·1	95,611·2
59	78	15,606·7	77,129·1
60	79	13,035·9	61,522·4
61	80	10,761·7	48,486·5
62	81	8,772·86	37,724·83
63	82	7,055·22	28,951·97
64	83	5,591·90	21,896·75
65	84	4,363·50	16,304·85
66	85	3,348·61	11,941·35
67	86	2,524·37	8,592·74
68	87	1,867·18	6,068·37
69	88	1,353·40	4,201·19
70	89	960·093	2,847·792
71	90	665·686	1,887·699
72	91	450·499	1,222·013
73	92	297·142	771·514
74	93	190·737	474·372
75	94	118·972	283·635
76	95	71·9957	164·6629
77	96	42·2000	92·6672
78	97	23·9186	50·4672
79	98	13·0865	26·5486
80	99	6·8993	13·4621
81	100	3·4986	6·5628
82	101	1·7032	3·0642
83	102	·7945	1·3610
84	103	·3544	·5665
85	104	·1509	·2121
86	105	·0612	·0612
		Female 88 Years older.	
0	88	15,744·7	47,683·3
1	89	9,962·21	31,938·63
2	90	6,929·43	21,976·42
3	91	4,877·64	15,046·99
4	92	3,408·22	10,169·35
5	93	2,347·98	6,761·13
6	94	1,590·27	4,413·15
7	95	1,056·25	2,822·88
8	96	686·498	1,766·633
9	97	436·079	1,080·135
10	98	270·343	644·056
11	99	163·328	373·713
12	100	96·0236	210·3852
13	101	54·8587	114·3616
14	102	30·4117	59·5029
15	103	16·3361	29·0912
16	104	8·4909	12·7551
17	105	4·2642	4·2642

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 20 Years older than Male.

Female 87 Years older than Male.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Female 20 Years older.**	
0	20	1,253,329	18,784,433
1	21	1,009,041	17,531,104
2	22	908,607	16,522,063
3	23	843,174	15,613,456
4	24	791,733	14,770,282
5	25	747,869	13,978,549
6	26	709,335	13,230,680
7	27	674,544	12,521,345
8	28	642,412	11,846,801
9	29	612,633	11,204,389
10	30	584,810	10,591,756
11	31	558,620	10,006,946
12	32	533,797	9,448,326
13	33	510,124	8,914,529
14	34	487,432	8,404,405
15	35	465,585	7,916,973
16	36	444,480	7,451,388
17	37	424,042	7,006,908
18	38	404,218	6,582,866
19	39	384,976	6,178,648
20	40	366,298	5,793,672
21	41	348,181	5,427,374
22	42	330,807	5,079,193
23	43	314,154	4,748,386
24	44	298,197	4,434,232
25	45	282,911	4,136,035
26	46	268,272	3,853,124
27	47	254,256	3,584,852
28	48	240,840	3,330,596
29	49	228,000	3,089,756
30	50	215,715	2,861,756
31	51	203,961	2,646,041
32	52	192,718	2,442,080
33	53	181,966	2,249,362
34	54	171,684	2,067,396
35	55	161,608	1,895,712
36	56	151,879	1,734,104
37	57	142,495	1,582,225
38	58	133,450	1,439,730
39	59	124,738	1,306,280
40	60	116,351	1,181,542
41	61	108,281	1,065,191
42	62	100,518	956,910
43	63	93,056·7	856,391·5
44	64	85,889·9	763,334·8
45	65	79,013·0	677,444·9
46	66	72,423·0	598,431·9
47	67	66,118·5	526,008·9
48	68	60,099·9	459,890·4
49	69	54,369·0	399,790·5
50	70	48,929·4	345,421·5
51	71	43,785·2	296,492·1
52	72	38,919·6	252,706·9
53	73	34,360·3	213,787·3
54	74	30,113·5	179,427·0
55	75	26,183·9	149,313·5
56	76	22,573·7	123,129·6
57	77	19,283·0	100,555·9
58	78	16,309·2	81,272·9
59	79	13,647·3	64,963·7
60	80	11,289·0	51,316·4
61	81	9,223·31	40,027·40
62	82	7,435·95	30,804·09
63	83	5,909·97	23,368·14
64	84	4,625·86	17,458·17
65	85	3,562·00	12,832·31
66	86	2,695·30	9,270·31
67	87	2,001·82	6,575·01
68	88	1,457·54	4,573·19
69	89	1,039·08	3,115·65
70	90	724·329	2,076·570
71	91	493·055	1,352·241
72	92	327·275	859·186
73	93	211·523	531·911
74	94	132·915	320·388
75	95	81·0745	187·4732
76	96	47·9286	106·3987
77	97	27·4149	58·4701
78	98	15·1468	31·0552
79	99	8·0693	15·9084
80	100	4·1376	7·8391
81	101	2·0382	3·7015
82	102	·9628	1·6633
83	103	·4353	·7005
84	104	·1879	·2652
85	105	·0773	·0773

Female 87 Years older.

x	y	$D_{x, y}$	$N_{x, y}$
0	87	20,169·8	63,498·5
1	88	12,975·8	43,328·7
2	89	9,184·91	30,352·93
3	90	6,585·43	21,168·02
4	91	4,691·46	14,582·59
5	92	3,298·38	9,891·13
6	93	2,282·09	6,592·75
7	94	1,549·98	4,310·66
8	95	1,031·22	2,760·68
9	96	671·262	1,729·455
10	97	426·904	1,058·193
11	98	264·881	631·289
12	99	160·117	366·408
13	100	94·1637	206·2910
14	101	53·7992	112·1273
15	102	29·8201	58·3281
16	103	16·0132	28·5080
17	104	8·3192	12·4948
18	105	4·1756	4·1756

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 21 Years older than Male.

Female 86 Years older than Male.

Ages		$D_{x,\ y}$	$N_{x,\ y}$
x	y	**Female 21 Years older.**	
0	21	1,224,365	18,241,916
1	22	985,501	17,017,551
2	23	887,219	16,032,050
3	24	823,152	15,144,831
4	25	772,775	14,321,679
5	26	729,815	13,548,904
6	27	692,076	12,819,089
7	28	658,003	12,127,013
8	29	626,538	11,469,010
9	30	597,379	10,842,472
10	31	570,140	10,245,093
11	32	544,500	9,674,953
12	33	520,200	9,130,453
13	34	497,031	8,610,253
14	35	474,822	8,113,222
15	36	453,443	7,638,400
16	37	432,792	7,184,957
17	38	412,797	6,752,165
18	39	393,404	6,339,368
19	40	374,583	5,945,964
20	41	356,317	5,571,381
21	42	338,600	5,215,064
22	43	321,612	4,876,464
23	44	305,329	4,554,852
24	45	289,727	4,249,523
25	46	274,783	3,959,796
26	47	260,473	3,685,013
27	48	246,772	3,424,540
28	49	233,659	3,177,768
29	50	221,110	2,944,109
30	51	209,104	2,722,999
31	52	197,619	2,513,895
32	53	186,635	2,316,276
33	54	176,132	2,129,641
34	55	165,838	1,953,509
35	56	155,897	1,787,671
36	57	146,307	1,631,774
37	58	137,064	1,485,467
38	59	128,161	1,348,403
39	60	119,587	1,220,242
40	61	111,337	1,100,655
41	62	103,399	989,318
42	63	95,768·3	885,918·8
43	64	88,436·4	790,150·5
44	65	81,398·9	701,714·1
45	66	74,652·4	620,315·2
46	67	68,195·3	545,662·8
47	68	62,028·0	477,467·5
48	69	56,152·4	415,439·5
49	70	50,571·7	359,287·1
50	71	45,290·6	308,715·4
51	72	40,314·2	263,424·8
52	73	35,628·0	223,110·6
53	74	31,257·8	187,482·6
54	75	27,209·5	156,224·8
55	76	23,486·3	129,015·3
56	77	20,089·2	105,529·0
57	78	17,015·9	85,439·8
58	79	14,261·7	68,423·9
59	80	11,818·5	54,162·2
60	81	9,675·25	42,343·74
61	82	7,817·75	32,668·49
62	83	6,228·89	24,850·74
63	84	4,888·98	18,621·85
64	85	3,776·17	13,732·87
65	86	2,867·06	9,956·70
66	87	2,137·36	7,089·64
67	88	1,562·64	4,952·28
68	89	1,119·03	3,389·64
69	90	783·918	2,270·614
70	91	536·490	1,486·696
71	92	358·191	950·206
72	93	232·974	592·015
73	94	147·399	359·041
74	95	90·5757	211·6415
75	96	53·9725	121·0658
76	97	31·1364	67·0933
77	98	17·3609	35·9569
78	99	9·3396	18·5960
79	100	4·8392	9·2564
80	101	2·4105	4·4172
81	102	1·1522	2·0067
82	103	·5274	·8545
83	104	·2308	·3271
84	105	·0963	·0963

x	y	**Female 86 Years older.**	
0	86	25,434·9	83,270·1
1	87	16,622·6	57,835·2
2	88	11,963·3	41,212·6
3	89	8,728·94	29,249·32
4	90	6,334·07	20,520·38
5	91	4,540·26	14,186·31
6	92	3,205·82	9,646·05
7	93	2,224·28	6,440·23
8	94	1,513·26	4,215·95
9	95	1,008·33	2,702·69
10	96	657·138	1,694·358
11	97	418·279	1,037·220
12	98	259·674	618·941
13	99	157·016	359·267
14	100	92·3453	202·2506
15	101	52·7527	109·9053
16	102	29·2307	57·1526
17	103	15·6895	27·9219
18	104	8·1463	12·2324
19	105	4·0861	4·0861

JOINT LIVES:—MALE AND FEMALE LIFE.

Female 22 Years older than Male.

Female 85 Years older than Male.

Ages *x*	Ages *y*	$D_{x, y}$	$N_{x, y}$
Female 22 Years older.			
0	22	1,195,802	17,708,524
1	23	962,302	16,512,722
2	24	866,151	15,550,420
3	25	803,442	14,684,269
4	26	754,120	13,880,827
5	27	712,057	13,126,707
6	28	675,105	12,414,650
7	29	641,744	11,739,545
8	30	610,939	11,097,801
9	31	582,393	10,486,862
10	32	555,728	9,904,469
11	33	530,631	9,348,741
12	34	506,848	8,818,110
13	35	484,172	8,311,262
14	36	462,439	7,827,090
15	37	441,520	7,364,651
16	38	421,315	6,923,131
17	39	401,754	6,501,816
18	40	382,784	6,100,062
19	41	364,376	5,717,278
20	42	346,512	5,352,902
21	43	329,188	5,006,390
22	44	312,577	4,677,202
23	45	296,657	4,364,625
24	46	281,404	4,067,968
25	47	266,795	3,786,564
26	48	252,806	3,519,769
27	49	239,414	3,266,963
28	50	226,598	3,027,549
29	51	214,334	2,800,951
30	52	202,603	2,586,617
31	53	191,382	2,384,014
32	54	180,652	2,192,632
33	55	170,134	2,011,980
34	56	159,977	1,841,846
35	57	150,178	1,681,869
36	58	140,732	1,531,691
37	59	131,631	1,390,959
38	60	122,868	1,259,328
39	61	114,433	1,136,460
40	62	106,318	1,022,027
41	63	98,513·4	915,708·5
42	64	91,013·3	817,195·1
43	65	83,812·2	726,181·8
44	66	76,906·5	642,369·6
45	67	70,294·5	565,463·1
46	68	63,976·4	495,168·6
47	69	57,953·9	431,192·2
48	70	52,230·5	373,238·3
49	71	46,810·9	321,007·8
50	72	41,700·3	274,196·9
51	73	36,904·6	232,496·6
52	74	32,411·0	195,592·0
53	75	28,243·4	163,181·0
54	76	24,406·3	134,937·6
55	77	20,901·4	110,531·3
56	78	17,727·3	89,629·9
57	79	14,879·6	71,902·6
58	80	12,350·5	57,023·0
59	81	10,129·0	44,672·5
60	82	8,200·82	34,543·46
61	83	6,548·72	26,342·64
62	84	5,152·81	19,793·92
63	85	3,990·96	14,641·11
64	86	3,039·44	10,650·15
65	87	2,273·56	7,610·71
66	88	1,668·45	5,337·15
67	89	1,199·72	3,668·70
68	90	844·240	2,468·981
69	91	580·626	1,624·741
70	92	389·746	1,044·115
71	93	254·981	654·369
72	94	162·347	399·388
73	95	100·446	237·041
74	96	60·2975	136·5947
75	97	35·0627	76·2972
76	98	19·7175	41·2345
77	99	10·7049	21·5170
78	100	5·6010	10·8121
79	101	2·8193	5·2111
80	102	1·3626	2·3918
81	103	·6312	1·0292
82	104	·2797	·3980
83	105	·1183	·1183
Female 85 Years older.			
0	85	31,600·1	107,619·2
1	86	20,961·8	76,019·1
2	87	15,325·6	55,057·3
3	88	11,369·4	39,731·7
4	89	8,395·75	28,362·29
5	90	6,129·93	19,966·54
6	91	4,412·86	13,836·61
7	92	3,124·61	9,423·75
8	93	2,171·58	6,299·14
9	94	1,479·67	4,127·56
10	95	987·117	2,647·891
11	96	643·861	1,660·774
12	97	410·056	1,016·913
13	98	254·644	606·857
14	99	153·984	352·213
15	100	90·5488	198·2294
16	101	51·7099	107·6806
17	102	28·6397	55·9707
18	103	15·3634	27·3310
19	104	7·9718	11·9676
20	105	3·9958	3·9958

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 23 Years older than Male.

Female 84 Years older than Male.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Female 23 Years older.**	
0	23	1,167,652	17,184,213
1	24	939,452	16,016,561
2	25	845,411	15,077,109
3	26	784,047	14,231,698
4	27	735,770	13,447,651
5	28	694,596	12,711,881
6	29	658,423	12,017,285
7	30	625,766	11,358,862
8	31	595,612	10,733,096
9	32	567,672	10,137,484
10	33	541,573	9,569,812
11	34	517,011	9,028,239
12	35	493,735	8,511,228
13	36	471,545	8,017,493
14	37	450,279	7,545,948
15	38	429,811	7,095,669
16	39	410,044	6,665,858
17	40	390,908	6,255,814
18	41	372,354	5,864,906
19	42	354,350	5,492,552
20	43	336,880	5,138,202
21	44	319,940	4,801,322
22	45	303,699	4,481,382
23	46	288,135	4,177,683
24	47	273,223	3,889,548
25	48	258,941	3,616,325
26	49	245,268	3,357,384
27	50	232,179	3,112,116
28	51	219,654	2,879,937
29	52	207,671	2,660,283
30	53	196,208	2,452,612
31	54	185,247	2,256,404
32	55	174,501	2,071,157
33	56	164,121	1,896,656
34	57	154,108	1,732,535
35	58	144,454	1,578,427
36	59	135,153	1,433,973
37	60	126,196	1,298,820
38	61	117,573	1,172,624
39	62	109,275	1,055,051
40	63	101,294	945,776
41	64	93,622·2	844,482·4
42	65	86,254·4	750,860·2
43	66	79,186·7	664,605·8
44	67	72,417·2	585,419·1
45	68	65,945·7	513,001·9
46	69	59,774·3	447,056·2
47	70	53,906·2	387,281·9
48	71	48,346·3	333,375·7
49	72	43,100·0	285,029·4
50	73	38,173·5	241,929·4
51	74	33,572·4	203,755·9
52	75	29,285·4	170,183·5
53	76	25,333·7	140,898·1
54	77	21,720·0	115,564·4
55	78	18,444·0	93,844·4
56	79	15,501·7	75,400·4
57	80	12,885·7	59,898·7
58	81	10,585·0	47,013·0
59	82	8,585·43	36,427·96
60	83	6,869·61	27,842·53
61	84	5,417·38	20,972·92
62	85	4,206·33	15,555·54
63	86	3,212·33	11,349·21
64	87	2,410·26	8,136·88
65	88	1,774·77	5,726·62
66	89	1,280·96	3,951·85
67	90	905·115	2,670·892
68	91	625·305	1,765·777
69	92	421·809	1,140·472
70	93	277·444	718·663
71	94	177·683	441·219
72	95	110·633	263·536
73	96	66·8684	152·9034
74	97	39·1718	86·0350
75	98	22·2040	46·8632
76	99	12·1580	24·6592
77	100	6·4198	12·5012
78	101	3·2631	6·0814
79	102	1·5937	2·8183
80	103	·7465	1·2246
81	104	·3347	·4781
82	105	·1434	·1434

Female 84 Years older.

x	y	$D_{x,y}$	$N_{x,y}$
0	84	38,710·5	137,181·8
1	85	26,042·7	98,471·3
2	86	19,326·2	72,428·6
3	87	14,564·8	53,102·4
4	88	10,935·5	38,537·6
5	89	8,125·17	27,602·05
6	90	5,957·91	19,476·88
7	91	4,301·07	13,518·97
8	92	3,050·57	9,217·90
9	93	2,123·38	6,167·33
10	94	1,448·54	4,043·95
11	95	967·173	2,595·409
12	96	631·205	1,628·236
13	97	402·114	997·031
14	98	249·727	594·917
15	99	150·988	345·190
16	100	88·7590	194·2022
17	101	50·6644	105·4432
18	102	28·0445	54·7788
19	103	15·0343	26·7343
20	104	7·7955	11·7000
21	105	3·9045	3·9045

JOINT LIVES:—MALE AND FEMALE LIFE.

Female 24 Years older than Male.

Female 83 Years older than Male.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	Female 24 Years older.	
0	24	1,139,926	16,668,943
1	25	916,957	15,529,017
2	26	825,002	14,612,060
3	27	764,969	13,787,058
4	28	717,728	13,022,089
5	29	677,433	12,304,361
6	30	642,030	11,626,928
7	31	610,067	10,984,898
8	32	580,557	10,374,831
9	33	553,213	9,794,274
10	34	527,672	9,241,061
11	35	503,635	8,713,389
12	36	480,859	8,209,754
13	37	459,146	7,728,895
14	38	438,338	7,269,749
15	39	418,313	6,831,411
16	40	398,975	6,413,098
17	41	380,256	6,014,123
18	42	362,108	5,633,867
19	43	344,500	5,271,759
20	44	327,416	4,927,259
21	45	310,853	4,599,843
22	46	294,975	4,288,990
23	47	279,758	3,994,015
24	48	265,181	3,714,257
25	49	251,221	3,449,076
26	50	237,856	3,197,855
27	51	225,064	2,959,999
28	52	212,825	2,734,935
29	53	201,116	2,522,110
30	54	189,919	2,320,994
31	55	178,939	2,131,075
32	56	168,333	1,952,136
33	57	158,100	1,783,803
34	58	148,235	1,625,703
35	59	138,728	1,477,468
36	60	129,573	1,338,740
37	61	120,757	1,209,167
38	62	112,273	1,088,410
39	63	104,111	976,137
40	64	96,264·5	872,026·3
41	65	88,726·9	775,761·8
42	66	81,494·1	687,034·9
43	67	74,564·2	605,540·8
44	68	67,937·0	530,976·6
45	69	61,614·3	463,039·6
46	70	55,599·5	401,425·3
47	71	49,897·4	345,825·8
48	72	44,513·8	295,928·4
49	73	39,454·8	251,414·6
50	74	34,726·7	211,959·8
51	75	30,334·8	177,233·1
52	76	26,268·3	146,898·3
53	77	22,545·4	120,630·0
54	78	19,166·5	98,084·6
55	79	16,128·5	78,918·1
56	80	13,424.4	62,789·6
57	81	11,043·6	49,365·2
58	82	8,971·92	38,321·60
59	83	7,191·78	29,349·68
60	84	5,682·83	22,157·90
61	85	4,422·31	16,475·07
62	86	3,385·68	12,052·76
63	87	2,547·36	8,667·08
64	88	1,881·48	6,119·72
65	89	1,362·59	4,238·24
66	90	966·400	2,875·651
67	91	670·393	1,909·251
68	92	454·267	1,238·858
69	93	300·268	784·591
70	94	193·336	484·323
71	95	121·083	290·987
72	96	73·6497	169·9040
73	97	43·4405	96·2543
74	98	24·8061	52·8138
75	99	13·6912	28·0077
76	100	7·2913	14·3165
77	101	3·7401	7·0252
78	102	1·8446	3·2851
79	103	·8731	1·4405
80	104	·3958	·5674
81	105	·1716	·1716

Female 83 Years older.

x	y	$D_{x, y}$	$N_{x, y}$
0	83	46,794·6	172,595·3
1	84	31,902·6	125,800·7
2	85	24,010·7	93,898·1
3	86	18,366·8	69,887·4
4	87	14,008·9	51,520·6
5	88	10,583·0	37,511·7
6	89	7,897·16	26,928·66
7	90	5,806·98	19,031·50
8	91	4,199·16	13,224·52
9	92	2,982·87	9,025·36
10	93	2,078·70	6,042·49
11	94	1,419·27	3,963·79
12	95	948·161	2,544·516
13	96	618·979	1,596·355
14	97	394·349	977·376
15	98	244·869	583·027
16	99	148·004	338·158
17	100	86·9645	190·1536
18	101	49·6115	103·1891
19	102	27·4437	53·5776
20	103	14·7017	26·1339
21	104	7·6175	11·4322
22	105	3·8147	3·8147

JOINT LIVES:—MALE AND FEMALE LIFE.

Female 25 Years older than Male.

Female 82 Years older than Male.

Female 25 Years older.

Ages		$D_{x,y}$	$N_{x,y}$
x	y		
0	25	1,112,631	16,162,648
1	26	894,821	15,050,017
2	27	804,928	14,155,196
3	28	746,211	13,350,268
4	29	699,993	12,604,057
5	30	660,566	11,904,064
6	31	625,924	11,243,498
7	32	594,647	10,617,574
8	33	565,770	10,022,927
9	34	539,013	9,457,157
10	35	514,021	8,918,144
11	36	490,501	8,404,123
12	37	468,215	7,913,622
13	38	446,970	7,445,407
14	39	426,612	6,998,437
15	40	407,020	6,571,825
16	41	388,103	6,164,805
17	42	369,793	5,776,702
18	43	352,042	5,406,909
19	44	334,822	5,054,867
20	45	318,117	4,720,045
21	46	301,923	4,401,928
22	47	286,399	4,100,005
23	48	271,523	3,813,606
24	49	257,274	3,542,083
25	50	243,629	3,284,809
26	51	230,567	3,041,180
27	52	218,067	2,810,613
28	53	206,107	2,592,546
29	54	194,669	2,386,439
30	55	183,451	2,191,770
31	56	172,615	2,008,319
32	57	162,158	1,835,704
33	58	152,075	1,673,546
34	59	142,359	1,521,471
35	60	133,000	1,379,112
36	61	123,988	1,246,112
37	62	115,314	1,122,124
38	63	106,968	1,006,810
39	64	98,942·1	899,841·7
40	65	91,231·1	800,899·6
41	66	83,830·1	709,668·5
42	67	76,736·9	625,838·4
43	68	69,951·2	549,101·5
44	69	63,474·8	479,150·3
45	70	57,311·0	415,675·5
46	71	51,464·7	358,364·5
47	72	45,941·9	306,899·8
48	73	40,749·0	260,957·9
49	74	35,892·3	220,208·9
50	75	31,377·8	184,316·6
51	76	27,209·6	152,938·8
52	77	23,377·1	125,729·2
53	78	19,894·7	102,352·1
54	79	16,760·2	82,457·4
55	80	13,967·2	65,697·2
56	81	11,505·4	51,730·0
57	82	9,360·67	40,224·58
58	83	7,515·54	30,863·91
59	84	5,949·35	23,348·37
60	85	4,639·00	17,399·02
61	86	3,559·52	12,760·02
62	87	2,684·83	9,200·50
63	88	1,988·50	6,515·67
64	89	1,444·51	4,527·17
65	90	1,027·98	3,082·66
66	91	715·785	2,054·680
67	92	487·023	1,338·895
68	93	323·374	851·872
69	94	209·241	528·498
70	95	131·750	319·257
71	96	80·6069	187·5067
72	97	47·8459	106·8998
73	98	27·5093	59·0539
74	99	15·2956	31·5446
75	100	8·2107	16·2490
76	101	4·2478	8·0383
77	102	2·1142	3·7905
78	103	1·0105	1·6763
79	104	·4629	·6658
80	105	·2029	·2029

Female 82 Years older.

Ages		$D_{x,y}$	$N_{x,y}$
x	y		
0	82	55,862·6	214,484·2
1	83	38,565·0	158,621·6
2	84	29,413·4	120,056·6
3	85	22,818·7	90,643·2
4	86	17,665·7	67,824·5
5	87	13,557·4	50,158·8
6	88	10,286·1	36,601·4
7	89	7,697·11	26,315·27
8	90	5,669·39	18,618·16
9	91	4,105·96	12,948·77
10	92	2,920·11	8,842·81
11	93	2,036·71	5,922·70
12	94	1,391·37	3,885·99
13	95	929·796	2,494·615
14	96	607·025	1,564·819
15	97	386·677	957·794
16	98	240·029	571·117
17	99	145·011	331·088
18	100	85·1572	186·0769
19	101	48·5486	100·9197
20	102	26·8367	52·3711
21	103	14·3660	25·5344
22	104	7·4422	11·1684
23	105	3·7262	3·7262

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 26 Years older than Male.

Female 81 Years older than Male.

Ages *x*	*y*	$D_{x,y}$	$N_{x,y}$
		Female 26 Years older.	
0	26	1,085,771	15,665,249
1	27	873,048	14,579,478
2	28	785,190	13,706,430
3	29	727,772	12,921,240
4	30	682,565	12,193,468
5	31	643,995	11,510.903
6	32	610,102	10,866,908
7	33	579.501	10,256,806
8	34	551,248	9,677.305
9	35	525,068	9,126,057
10	36	500,615	8,600,989
11	37	477,603	8,100,374
12	38	455,798	7,622,771
13	39	435,012	7,166,973
14	40	415,095	6,731,961
15	41	395.929	6,316,866
16	42	377,424	5.920,937
17	43	359.513	5.543.513
18	44	342,153	5,184,000
19	45	325,312	4,841,847
20	46	308,978	4.516,535
21	47	293,145	4,207,557
22	48	277,969	3,914,412
23	49	263,427	3,636,443
24	50	249,499	3.373,016
25	51	236,163	3,123.517
26	52	223,398	2,887,354
27	53	211,184	2,663,956
28	54	199,500	2.452,772
29	55	188,040	2,253,272
30	56	176,967	2,065,232
31	57	166,282	1,888,265
32	58	155,978	1,721,983
33	59	146,047	1,566,005
34	60	136,481	1,419,958
35	61	127,268	1,283,477
36	62	118,399	1,156,209
37	63	109,865	1,037,810
38	64	101,657	927,945
39	65	93,768·6	826,287·6
40	66	86,196·1	732,519·0
41	67	78,936·5	646,322·9
42	68	71,989·5	567,386·4
43	69	65,356·7	495,396·9
44	70	59,041·5	430,040·2
45	71	53,048·9	370,998·7
46	72	47,385·0	317,949·8
47	73	42,056·3	270,564·8
48	74	37,069·7	228,508·5
49	75	32,431·0	191,438·8
50	76	28,145·1	159,007·8
51	77	24,214·8	130,862·7
52	78	20,628·7	106,647·9
53	79	17,397·0	86,019·2
54	80	14,514·2	68,622·2

Ages *x*	*y*	$D_{x,y}$	$N_{x,y}$
		Female 26 Years older.	
55	81	11,970·5	54,108·0
56	82	9,752·03	42,137·49
57	83	7,841·19	32,385·46
58	84	6,217·18	24,544·27
59	85	4,856·56	18,327·09
60	86	3,733·93	13,470·53
61	87	2,822·68	9,736·60
62	88	2,095·81	6,913·92
63	89	1,526·68	4,818·11
64	90	1,089·79	3,291·43
65	91	761·399	2,201·644
66	92	519·999	1,440·245
67	93	346·691	920·246
68	94	225·342	573·555
69	95	142·589	348·213
70	96	87·7080	205·6240
71	97	52·3656	117·9160
72	98	30·2990	65·5504
73	99	16·9625	35·2514
74	100	9·1729	18·2889
75	101	4·7835	9·1160
76	102	2·4012	4·3325
77	103	1·1582	1·9313
78	104	·5358	·7731
79	105	·2373	·2373

Ages *x*	*y*	$D_{x,y}$	$N_{x,y}$
		Female 81 Years older.	
0	81	65,906·2	263,445·6
1	82	46,038·3	197,539·4
2	83	35,556·0	151,501·1
3	84	27,953·3	115,945·1
4	85	21,947·7	87,991·8
5	86	17,096·4	66,044·1
6	87	13,176·9	48,947·7
7	88	10,025·5	35,770·8
8	89	7,514·73	25,745·30
9	90	5,543·56	18,230·57
10	91	4,019·57	12,687·01
11	92	2,861·11	8,667·44
12	93	1,996·67	5,806·33
13	94	1,364·42	3,809·66
14	95	911·840	2,445·240
15	96	595·217	1,533·400
16	97	379·034	938·183
17	98	235·175	559·149
18	99	141·998	323·974
19	100	83·3327	181·9756
20	101	47·4748	98·6429
21	102	26·2239	51·1681
22	103	14·0354	24·9442
23	104	7·2696	10·9088
24	105	3·6392	3·6392

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 27 Years older than Male.

Female 80 Years older than Male.

Female 27 Years older.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
0	27	1,059,352	15,176,679
1	28	851,639	14,117,327
2	29	765,788	13,265,688
3	30	709,652	12,499,900
4	31	665,442	11,790,248
5	32	627,717	11,124,806
6	33	594,562	10,497,089
7	34	564,626	9,902,527
8	35	536,986	9,337,901
9	36	511,375	8,800,915
10	37	487,452	8,289,540
11	38	464,938	7,802,088
12	39	443,605	7,337,150
13	40	423,269	6,893,545
14	41	403,784	6,470,276
15	42	385,034	6,066,492
16	43	366,932	5,681,458
17	44	349,414	5,314,526
18	45	332,435	4,965,112
19	46	315,967	4,632,677
20	47	299,995	4,316,710
21	48	284,517	4,016,715
22	49	269,681	3,732,198
23	50	255,466	3,462,517
24	51	241,853	3,207,051
25	52	228,820	2,965,198
26	53	216,347	2,736,378
27	54	204,414	2,520,031
28	55	192,706	2,315,617
29	56	181,394	2,122,911
30	57	170,475	1,941,517
31	58	159,945	1,771,042
32	59	149,795	1,611,097
33	60	140,017	1,461,302
34	61	130,599	1,321,285
35	62	121,531	1,190,686
36	63	112,804	1,069,155
37	64	104,410	956,351
38	65	96,341·2	851,941·2
39	66	88,593·6	755,600·0
40	67	81,164·4	667,006·4
41	68	74,053·1	585,842·0
42	69	67,261·1	511,788·9
43	70	60,792·0	444,527·8
44	71	54,650·8	383,735·8
45	72	48,843·6	329,085·0
46	73	43,377·3	280,241·4
47	74	38,259·0	236,864·1
48	75	33,494·8	198,605·1
49	76	29,089·8	165,110·3
50	77	25,047·4	136,020·5
51	78	21,367·9	110,973·1
52	79	18,038·9	89,605·2
53	80	15,065·7	71,566·3
54	81	12,439·4	56,500·6
55	82	10,146·3	44,061·2
56	83	8,169·02	33,914·87
57	84	6,486·56	25,745·85
58	85	5,075·19	19,259·29
59	86	3,909·05	14,184·10
60	87	2,960·99	10,275·05
61	88	2,203·42	7,314·06
62	89	1,609·06	5,110·64
63	90	1,151·78	3,501·58
64	91	807·179	2,349·804
65	92	553·136	1,542·625
66	93	370·166	989·489
67	94	241·591	619·323
68	95	153·561	377·732
69	96	94·9235	224·1707
70	97	56·9787	129·2472
71	98	33·1612	72·2685
72	99	18·6827	39·1073
73	100	10·1725	20·4246
74	101	5·3440	10·2521
75	102	2·7040	4·9081
76	103	1·3154	2·2041
77	104	·6141	·8887
78	105	·2746	·2746

Female 80 Years older.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
0	80	76,899·1	320,036·1
1	81	54,315·5	243,137·0
2	82	42,446·1	188,821.5
3	83	33,790·9	146,375·4
4	84	26,886·3	112,584·5
5	85	21,240·4	85,698·2
6	86	16,616·6	64,457·8
7	87	12,843·1	47,841·2
8	88	9,787·94	34,998·14
9	89	7,347·95	25,210·20
10	90	5,426·92	17,862·25
11	91	3,938·36	12,435·33
12	92	2,804·87	8,496·97
13	93	1,958·00	5,692·10
14	94	1,338·07	3,734·10
15	95	894·102	2,396·027
16	96	583·451	1,501·925
17	97	371·371	918·474
18	98	230·283	547·103
19	99	138·956	316·820
20	100	81·4895	177·8640
21	101	46·3908	96·3745
22	102	25·6204	49·9837
23	103	13·7100	24·3633
24	104	7·0998	10·6533
25	105	3·5535	3·5535

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 28 Years older than Male.

Female 79 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 28 Years older.**	
0	28	1,033,375	14,696,846
1	29	830,596	13,663,471
2	30	746,722	12,832,875
3	31	691,850	12,086,153
4	32	648,621	11,394,303
5	33	611,728	10,745,682
6	34	579,301	10,133,954
7	35	550,019	9,554,653
8	36	522,982	9,004,634
9	37	497,928	8,481,652
10	38	474,525	7,983,724
11	39	452,500	7,509,199
12	40	431,629	7,056,699
13	41	411,735	6,625,070
14	42	392,673	6,213,335
15	43	374,331	5,820,662
16	44	356,624	5,446,331
17	45	339,490	5,089,707
18	46	322,885	4,750,217
19	47	306,781	4,427,332
20	48	291,165	4,120,551
21	49	276,033	3,829,386
22	50	261,531	3,553,353
23	51	247,638	3,291,822
24	52	234,334	3,044,184
25	53	221,598	2,809,850
26	54	209,412	2,588,252
27	55	197,453	2,378,840
28	56	185,896	2,181,387
29	57	174,739	1,995,491
30	58	163,978	1,820,752
31	59	153,605	1,656,774
32	60	143,610	1,503,169
33	61	133,982	1,359,559
34	62	124,711	1,225,577
35	63	115,788	1,100,866
36	64	107,203	985,078
37	65	98,950·4	877,874·8
38	66	91,024·2	778,924·4
39	67	83,422·0	687,900·2
40	68	76,143·2	604,478·2
41	69	69,189·1	528,335·0
42	70	62,563·4	459,145·9
43	71	56,271·1	396,582·5
44	72	50,318·4	340,311·4
45	73	44,712·6	289,993·0
46	74	39,460·7	245,280·4
47	75	34,569·4	205,819·7
48	76	30,044·0	171,250·3
49	77	25,888·1	141,206·3
50	78	22,102·6	115,318·2
51	79	18,685·3	93,215·6
52	80	15,621·6	74,530·3
53	81	12,912·1	58,908·7
54	82	10,543·7	45,996·6
55	83	8,499·29	35,452·92
56	84	6,757·76	26,953·63
57	85	5,295·10	20,195·87
58	86	4,085·02	14,900·77
59	87	3,099·86	10,815·75
60	88	2,311·38	7,715·89
61	89	1,691·68	5,404·51
62	90	1,213·94	3,712·83
63	91	853·092	2,498·893
64	92	586·394	1,645·801
65	93	393·755	1,059·407
66	94	257·949	665·652
67	95	164·634	407·703
68	96	102·228	243·069
69	97	61·6662	140·8413
70	98	36·0826	79·1751
71	99	20·4475	43·0925
72	100	11·2041	22·6450
73	101	5·9264	11·4409
74	102	3·0209	5·5145
75	103	1·4813	2·4936
76	104	·6975	1·0123
77	105	·3148	·3148

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 79 Years older.**	
0	79	88,798·6	384,761·9
1	80	63,375·2	295,963·3
2	81	50,077·5	232,588·1
3	82	40,339·0	182,510·6
4	83	32,501·1	142,171·6
5	84	26,019·8	109,670·5
6	85	20,644·4	83,650·7
7	86	16,195·7	63,006·3
8	87	12,538·8	46,810·6
9	88	9,570·70	34,271·76
10	89	7,193·34	24,701·06
11	90	5,317·28	17,507·72
12	91	3,860·94	12,190·44
13	92	2,750·54	8,329·50
14	93	1,920·18	5,578·96
15	94	1,312·04	3,658·78
16	95	876·429	2,346·743
17	96	571·655	1,470·314
18	97	363·653	898·659
19	98	225·354	535·006
20	99	135·882	309·652
21	100	79·6289	173·7701
22	101	45·3232	94·1412
23	102	25·0263	48·8180
24	103	13·3897	23·7917
25	104	6·9327	10·4020
26	105	3·4693	3·4693

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 29 Years older than Male.

Female 78 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	Female 29 Years older.	
0	29	1,007,841	14,225,660
1	30	809,916	13,217,819
2	31	727,989	12,407,903
3	32	674,362	11,679,914
4	33	632,100	11,005,552
5	34	596,027	10,373,452
6	35	564,314	9,777,425
7	36	535,675	9,213,111
8	37	509,230	8,677,436
9	38	484,724	8,168,206
10	39	461,831	7,683,482
11	40	440,284	7,221,651
12	41	419,868	6,781,367
13	42	400,405	6,361,499
14	43	381,758	5,961,094
15	44	363,816	5,579,336
16	45	346,496	5,215,520
17	46	329,737	4,869,024
18	47	313,497	4,539,287
19	48	297,751	4,225,790
20	49	282,483	3,928,039
21	50	267,692	3,645,556
22	51	253,516	3,377,864
23	52	239,938	3,124,348
24	53	226,938	2,884,410
25	54	214,495	2,657,472
26	55	202,281	2,442,977
27	56	190,475	2,240,696
28	57	179,076	2,050,221
29	58	168,080	1,871,145
30	59	157,479	1,703,065
31	60	147,262	1,545,586
32	61	137,421	1,398,324
33	62	127,942	1,260,903
34	63	118,818	1,132,961
35	64	110,039	1,014,143
36	65	101,598	904,104
37	66	93,489·4	802,506·2
38	67	85,710·7	709,016·8
39	68	78,261·1	623,306·1
40	69	71,141·9	545,045·0
41	70	64,356·8	473,903·1
42	71	57,910·7	409,546·3
43	72	51,810·3	351,635·6
44	73	46,062·7	299,825·3
45	74	40,675·4	253,762·6
46	75	35,655·2	213,087·2
47	76	31,007·9	177,432·0
48	77	26,737·3	146,424·1
49	78	22,844·5	119,686·8
50	79	19,327·7	96,842·3
51	80	16,181·4	77,514·6
52	81	13,388·4	61,333·2
53	82	10,944·4	47,944·8
54	83	8,832·19	37,000·43
55	84	7,030·98	28,168·24
56	85	5,516·48	21,137·26
57	86	4,262·03	15,620·78
58	87	3,239·41	11,358·75
59	88	2,419·78	8,119·34
60	89	1,774·57	5,699·56
61	90	1,276·27	3,924·99
62	91	899·128	2,648·722
63	92	619·749	1,749·594
64	93	417·429	1,129·845
65	94	274·387	712·416
66	95	175·781	438·029
67	96	109·599	262·248
68	97	66·4114	152·6491
69	98	39·0510	86·2377
70	99	22·2488	47·1867
71	100	12·2625	24·9379
72	101	6·5274	12·6754
73	102	3·3501	6·1480
74	103	1·6549	2·7979
75	104	·7855	1·1430
76	105	·3575	·3575

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	Female 78 Years older.	
0	78	101,547	458,067
1	79	73,181·9	356,519·8
2	80	58,430·3	283,337·9
3	81	47,591·5	224,907·6
4	82	38,799·2	177,316·1
5	83	31,453·6	138,516·9
6	84	25,289·6	107,063·3
7	85	20,121·4	81,773·7
8	86	15,812·0	61,652·3
9	87	12,260·5	45,840·3
10	88	9,369·33	33,579·84
11	89	7,048·01	24,210·51
12	90	5,212·75	17,162·50
13	91	3,786·15	11,949·75
14	92	2,697·42	8,163·60
15	93	1,882·83	5,466·18
16	94	1,286·11	3,583·35
17	95	858·709	2,297·235
18	96	559·775	1,438·526
19	97	355·862	878·751
20	98	220·370	522·889
21	99	132·779	302·519
22	100	77·7963	169·7399
23	101	44·2722	91·9436
24	102	24·4417	47·6714
25	103	13·0747	23·2297
26	104	6·7685	10·1550
27	105	3·3865	3·3865

JOINT LIVES:—MALE AND FEMALE LIFE.

Female 30 Years older than Male.

Female 77 Years older than Male.

Female 30 Years older.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
0	30	982,747	13,763,013
1	31	789,598	12,780,266
2	32	709,588	11,990,668
3	33	657,185	11,281,080
4	34	615,876	10,623,895
5	35	580,607	10,008,019
6	36	549,597	9,427,412
7	37	521,589	8,877,815
8	38	495,726	8,356,226
9	39	471,756	7,860,500
10	40	449,363	7,388,744
11	41	428,286	6,939,381
12	42	408,314	6,511,095
13	43	389,275	6,102,781
14	44	371,034	5,713,506
15	45	353,483	5,342,472
16	46	336,541	4,988,989
17	47	320,151	4,652,448
18	48	304,270	4,332,297
19	49	288,873	4,028,027
20	50	273,947	3,739,154
21	51	259,488	3,465,207
22	52	245,634	3,205,719
23	53	232,365	2,960,085
24	54	219,663	2,727,720
25	55	207,190	2,508,057
26	56	195,132	2,300,867
27	57	183,487	2,105,735
28	58	172,251	1,922,248
29	59	161,418	1,749,997
30	60	150,976	1,588,579
31	61	140,916	1,437,603
32	62	131,226	1,296,687
33	63	121,897	1,165,461
34	64	112,919	1,043,564
35	65	104,285	930,645
36	66	95,990·8	826,359·9
37	67	88,032·0	730,369·1
38	68	80,408·2	642,337·1
39	69	73,120·7	561,928·9
40	70	66,173·2	488,808·2
41	71	59,570·7	422,635·0
42	72	53,320·0	363,064·3
43	73	47,428·4	309,744·3
44	74	41,903·6	262,315·9
45	75	36,752·8	220,412·3
46	76	31,981·9	183,659·5
47	77	27,595·1	151,677·6
48	78	23,593·8	124,082·5
49	79	19,976·5	100,488·7
50	80	16,737·7	80,512·2
51	81	13,868·2	63,774·5
52	82	11,348·1	49,906·3
53	83	9,167·80	38,558·17
54	84	7,306·37	29,390·37
55	85	5,739·51	22,084·00
56	86	4,440·22	16,344·49
57	87	3,379·77	11,904·27
58	88	2,528·72	8,524·50
59	89	1,857·80	5,995·78
60	90	1,338·80	4,137·98
61	91	945·295	2,799·176
62	92	653·193	1,853·881
63	93	441·174	1,200·688
64	94	290·884	759·514
65	95	186·983	468·630
66	96	117·020	281·647
67	97	71·2001	164·6272
68	98	42·0559	93·4271
69	99	24·0792	51·3712
70	100	13·3428	27·2920
71	101	7·1440	13·9492
72	102	3·6898	6·8052
73	103	1·8353	3·1154
74	104	·8775	1·2801
75	105	·4026	·4026

Female 77 Years older.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
0	77	115,077	540,332
1	78	83,688·7	425,254·7
2	79	67,471·9	341,566·0
3	80	55,529·6	274,094·1
4	81	45,775·0	218,564·5
5	82	37,548·8	172,789·5
6	83	30,571·0	135,240·7
7	84	24,649·0	104,669·7
8	85	19,644·6	80,020·7
9	86	15,461·0	60,376·1
10	87	12,002·6	44,915·1
11	88	9,180·03	32,912·46
12	89	6,909·46	23,732·43
13	90	5,111·79	16,822·97
14	91	3,713·04	11,711·18
15	92	2,644·95	7,998·14
16	93	1,845·61	5,353·19
17	94	1,260·11	3,507·58
18	95	840·863	2,247·471
19	96	547·782	1,406·608
20	97	347·990	858·826
21	98	215·338	510·836
22	99	129·724	295·498
23	100	75·9923	165·7738
24	101	43·2380	89·7815
25	102	23·8666	46·5435
26	103	12·7649	22·6769
27	104	6·6069	9·9120
28	105	3·3051	3·3051

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 31 Years older than Male.

Female 76 Years older than Male.

Female 31 Years older.

Ages x	Ages y	$D_{x, y}$	$N_{x, y}$
0	31	958,094	13,308,808
1	32	769,639	12,350,714
2	33	691,514	11,581,075
3	34	640,316	10,889,561
4	35	599,942	10,249,245
5	36	565,465	9,649,303
6	37	535,145	9,083,838
7	38	507,757	8,548,693
8	39	482,464	8,040,936
9	40	459,021	7,558,472
10	41	437,118	7,099,451
11	42	416,501	6,662,333
12	43	396,964	6,245,832
13	44	378,340	5,848,868
14	45	360,495	5,470,528
15	46	343,328	5,110,033
16	47	326,757	4,766,705
17	48	310,727	4,439,948
18	49	295,197	4,129,221
19	50	280,143	3,834,024
20	51	265,552	3,553,881
21	52	251,421	3,288,329
22	53	237,882	3,036,908
23	54	224,917	2,799,026
24	55	212,182	2,574,109
25	56	199,868	2,361,927
26	57	187,973	2,162,059
27	58	176,494	1,974,086
28	59	165,424	1,797,592
29	60	154,752	1,632,168
30	61	144,469	1,477,416
31	62	134,563	1,332,947
32	63	125,025	1,198,384
33	64	115,844	1,073,359
34	65	107,015	957,515
35	66	98,530·0	850,499·8
36	67	90,387·3	751,969·8
37	68	82,585·8	661,582·5
38	69	75,126·8	578,996·7
39	70	68,013·7	503,869·9
40	71	61,252·0	435,856·2
41	72	54,848·4	374,604·2
42	73	48,810·4	319,755·8
43	74	43,146·0	270,945·4
44	75	37,862·6	227,799·4
45	76	32,966·4	189,936·8
46	77	28,461·9	156,970·4
47	78	24,350·8	128,508·5
48	79	20,631·7	104,157·7
49	80	17,299·5	83,526·0
50	81	14,345·0	66,226·5
51	82	11,754·8	51,881·5
52	83	9,506·04	40,126·66
53	84	7,584·00	30,620·62
54	85	5,964·32	23,036·62
55	86	4,619·73	17,072·30
56	87	3,521·07	12,452·57
57	88	2,638·28	8,931·50
58	89	1,941·43	6,293·22
59	90	1,401·59	4,351·79
60	91	991·614	2,950·196
61	92	686·731	1,958·582
62	93	464·981	1,271·851
63	94	307·430	806·870
64	95	198·225	499·440
65	96	124·477	301·215
66	97	76·0210	176·7381
67	98	45·0884	100·7171
68	99	25·9321	55·6287
69	100	14·4405	29·6966
70	101	7·7734	15·2561
71	102	4·0384	7·4827
72	103	2·0214	3·4443
73	104	·9731	1·4229
74	105	·4498	·4498

Female 76 Years older.

Ages x	Ages y	$D_{x, y}$	$N_{x, y}$
0	76	129,309	631,861
1	77	94,838·6	502,552·1
2	78	77,158·9	407,713·5
3	79	64,122·4	330,554·6
4	80	53,410·1	266,432·2
5	81	44,299·7	213,022·1
6	82	36,495·1	168,722·4
7	83	29,796·5	132,227·3
8	84	24,064·9	102,430·8
9	85	19,208·6	78,365·9
10	86	15,135·7	59,157·3
11	87	11,760·1	44,021·6
12	88	8,999·58	32,261·51
13	89	6,775·63	23,261·93
14	90	5,013·07	16,486·30
15	91	3,640·81	11,473·23
16	92	2,592·67	7,832·42
17	93	1,808·30	5,239·75
18	94	1,233·92	3,431·45
19	95	822·848	2,197·529
20	96	535·666	1,374·681
21	97	340·045	839·015
22	98	210·382	498·970
23	99	126·716	288·588
24	100	74·2172	161·8724
25	101	42·2207	87·6552
26	102	23·3011	45·4345
27	103	12·4602	22·1334
28	104	6·4481	9·6732
29	105	3·2251	3·2251

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 32 Years older than Male.

Female 75 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 32 Years older.**	
0	32	933,876	12,862,942
1	33	750,036	11,929,066
2	34	673,764	11,179,030
3	35	623,751	10,505,266
4	36	584,296	9,881,515
5	37	550,596	9,297,219
6	38	520,954	8,746,623
7	39	494,173	8,225,669
8	40	469,440	7,731,496
9	41	446,513	7,262,056
10	42	425,090	6,815,543
11	43	404,924	6,390,453
12	44	385,813	5,985,529
13	45	367,594	5,599,716
14	46	350,139	5,232,122
15	47	333,346	4,881,983
16	48	317,139	4,548,637
17	49	301,462	4,231,498
18	50	286,276	3,930,036
19	51	271,558	3,643,760
20	52	257,295	3,372,202
21	53	243,485	3,114,907
22	54	230,256	2,871,422
23	55	217,257	2,641,166
24	56	204,683	2,423,909
25	57	192,535	2,219,226
26	58	180,809	2,026,691
27	59	169,498	1,845,882
28	60	158,593	1,676,384
29	61	148,083	1,517,791
30	62	137,957	1,369,708
31	63	128,205	1,231,751
32	64	118,817	1,103,546
33	65	109,787	984,729
34	66	101,109	874,942
35	67	92,778·3	773,832·7
36	68	84,795·5	681,054·4
37	69	77,161·4	596,258·9
38	70	69,879·7	519,097·5
39	71	62,955·8	449,217·8
40	72	56,396·4	386,262·0
41	73	50,209·5	329,865·6
42	74	44,403·2	279,656·1
43	75	38,985·1	235,252·9
44	76	33,961·8	196,267·8
45	77	29,338·0	162,306·0
46	78	25,115·7	132,968·0
47	79	21,293·7	107,852·3
48	80	17,867·0	86,558·6
49	81	14,826·5	68,691·6
50	82	12,158·9	53,865·1
51	83	9,846·67	41,706·15
52	84	7,863·80	31,859·48
53	85	6,190·95	23,995·68
54	86	4,800·68	17,804·73
55	87	3,663·43	13,004·05
56	88	2,748·59	9,340·62
57	89	2,025·55	6,592·03
58	90	1,464·69	4,566·48
59	91	1,038·12	3,101·79
60	92	720·381	2,063·669
61	93	488·856	1,343·288
62	94	324·020	854·432
63	95	209·501	530·412
64	96	131·961	320·911
65	97	80·8655	188·9504
66	98	48·1414	108·0849
67	99	27·8020	59·9435
68	100	15·5517	32·1415
69	101	8·4128	16·5898
		4·3941	8·1770
70	102	2·2123	3·7829
71	103		
72	104	1·0718	1·5706
73	105	·4988	·4988

Female 75 Years older.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
0	75	144,161	732,892
1	76	106,568	588,731
2	77	87,438·9	482,163·2
3	78	73,328·5	394,724·3
4	79	61,674·8	321,395·8
5	80	51,688·7	259,721·0
6	81	43,056·6	208,032·3
7	82	35,570·6	164,975·7
8	83	29,090·5	129,405·1
9	84	23,530·8	100,314·6
10	85	18,804·5	76,783·8
11	86	14,829·9	57,979·3
12	87	11,528·9	43,149·4
13	88	8,825·26	31,620·48
14	89	6,644·78	22,795·22
15	90	4,915·55	16,150·44
16	91	3,568·84	11,234·89
17	92	2,540·25	7,666·05
18	93	1,770·72	5,125·80
19	94	1,207·48	3,355·08
20	95	804·648	2,147·597
21	96	523·435	1,342·949
22	97	332·219	819·514
23	98	205·504	487·295
24	99	123·756	281·791
25	100	72·4710	158·0354
26	101	41·2203	85·5644
27	102	22·7450	44·3441
28	103	12·1607	21·5991
29	104	6·2920	9·4384
30	105	3·1464	3·1464

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 33 Years older than Male.

Female 74 Years older than Male.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Female 33 Years older.**	
0	33	910,090	12,425,310
1	34	730,784	11,515,220
2	35	656,333	10,784,436
3	36	607,484	10,128,103
4	37	568,932	9,520,619
5	38	535,995	8,951,687
6	39	507,017	8,415,692
7	40	480,833	7,908,675
8	41	456,648	7,427,842
9	42	434,226	6,971,194
10	43	413,274	6,536,968
11	44	393,549	6,123,694
12	45	374,855	5,730,145
13	46	357,034	5,355,290
14	47	339,960	4,998,256
15	48	323,534	4,658,296
16	49	307,683	4,334,762
17	50	292,352	4,027,079
18	51	277,504	3,734,727
19	52	263,115	3,457,223
20	53	249,175	3,194,108
21	54	235,680	2,944,933
22	55	222,415	2,709,253
23	56	209,579	2,486,838
24	57	197,174	2,277,259
25	58	185,198	2,080,085
26	59	173,642	1,894,887
27	60	162,499	1,721,245
28	61	151,758	1,558,746
29	62	141,407	1,406,988
30	63	131,438	1,265,581
31	64	121,839	1,134,143
32	65	112,605	1,012,304
33	66	103,728	899,699
34	67	95,206·3	795,971·1
35	68	87,038·5	700,764·8
36	69	79,225·9	613,726·3
37	70	71,772·2	534,500·4
38	71	64,683·0	462,728·2
39	72	57,965·1	398,045·2
40	73	51,626·7	340,080·1
41	74	45,676·0	288,453·4
42	75	40,121·1	242,777·4
43	76	34,968·7	202,656·3
44	77	30,223·9	167,687·6
45	78	25,888·8	137,463·7
46	79	21,962·5	111,574·9
47	80	18,440·2	89,612·4
48	81	15,312·8	71,172·2
49	82	12,567·1	55,859·4
50	83	10,185·2	43,292·3
51	84	8,145·59	33,107·07
52	85	6,419·36	24,961·48
53	86	4,983·10	18,542 12
54	87	3,806·92	13,559·02
55	88	2,859·71	9,752·10
56	89	2,110·24	6,892·39
57	90	1,528·15	4,782·15
58	91	1,084·85	3,254·00
59	92	754·166	2,169·146
60	93	512·809	1,414·980
61	94	340·657	902·171
62	95	220·806	561·514
63	96	139·468	340·708
64	97	85·7276	201·2397
65	98	51·2092	115·5121
66	99	29·6844	64·3029
67	100	16·6730	34·6185
68	101	9·0602	17·9455
69	102	4·7556	8·8853
70	103	2·4072	4·1297
71	104	1·1731	1·7225
72	105	·5494	·5494

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Female 74 Years older.**	
0	74	159,547	843,588
1	75	118,808	684,041
2	76	98,252·9	565,232·9
3	77	83,098·1	466,980·0
4	78	70,529·5	383,881·9
5	79	59,687·1	313,352·4
6	80	50,238·3	253,665·3
7	81	41,965·8	203,427·0
8	82	34,727·7	161,461·2
9	83	28,444·9	126,733·5
10	84	23,035·7	98,288·6
11	85	18,424·5	75,252·9
12	86	14,538·4	56,828·4
13	87	11,305·6	42,290·0
14	88	8,654·83	30,984·43
15	89	6,515·52	22,329·60
16	90	4,818·39	15,814·08
17	91	3,496·69	10,995·69
18	92	2,487·46	7,499·00
19	93	1,732·78	5,011·54
20	94	1,180·77	3,278·76
21	95	786·275	2,097·988
22	96	511·389	1,311·713
23	97	324·515	800·324
24	98	200·703	475·809
25	99	120·844	275·106
26	100	70·7537	154·2620
27	101	40·2365	83·5083
28	102	22·1982	43·2718
29	103	11·8662	21·0736
30	104	6·1384	9·2074
31	105	3·0690	3·0690

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 34 Years older than Male.

Female 73 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 34 Years older.**	
0	34	886,729	11,995,795
1	35	711,878	11,109,066
2	36	639,217	10,397,188
3	37	591,510	9,757,971
4	38	553,845	9,166,461
5	39	521,656	8,612,616
6	40	493,330	8,090,960
7	41	467,731	7,597,630
8	42	444,082	7,129,899
9	43	422,156	6,685,817
10	44	401,664	6,263,661
11	45	382,371	5,861,997
12	46	364,086	5,479,626
13	47	346,654	5,115,540
14	48	329,953	4,768,886
15	49	313,887	4,438,933
16	50	298,385	4,125,046
17	51	283,393	3,826,661
18	52	268,876	3,543,268
19	53	254,811	3,274,392
20	54	241,187	3,019,581
21	55	227,654	2,778,394
22	56	214,554	2,550,740
23	57	201,890	2,336,186
24	58	189,660	2,134,296
25	59	177,857	1,944,636
26	60	166,472	1,766,779
27	61	155,496	1,600,307
28	62	144,917	1,444,811
29	63	134,725	1,299,894
30	64	124,912	1,165,169
31	65	115,468	1,040,257
32	66	106,390	924,789
33	67	97,672·9	818,399·0
34	68	89,316·3	720,726·1
35	69	81,321·7	631,409·8
36	70	73,692·6	550,088·1
37	71	66,434·7	476,395·5
38	72	59,555·4	409,960·8
39	73	53,062·6	350,405·4
40	74	46,965·2	297,342·8
41	75	41,271·1	250,377·6
42	76	35,987·7	209,106·5
43	77	31,120·0	173,118·8
44	78	26,670·5	141,998·8
45	79	22,638·6	115,328·3
46	80	19,019·4	92,689·7
47	81	15,804·1	73,670·3
48	82	12,979·3	57,866·2
49	83	10,527·1	44,886·9
50	84	8,425·65	34,359·80
51	85	6,649·39	25,934·15
52	86	5,166·95	19,284·76
53	87	3,951·58	14,117·81
54	88	2,971·72	10,166·23
55	89	2,195·56	7,194·51
56	90	1,592·04	4,998·95
57	91	1,131·86	3,406·91
58	92	788·117	2,275·052
59	93	536·860	1,486·935
60	94	357·350	950·075
61	95	232·143	592·725
62	96	146·994	360·582
63	97	90·6039	213·5882
64	98	54·2882	122·9843
65	99	31·5761	68·6961
66	100	17·8020	37·1200
67	101	9·7135	19·3180
68	102	5·1216	9·6045
69	103	2·6052	4·4829
70	104	1·2764	1·8777
71	105	·6013	·6013

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 73 Years older.**	
0	73	175,383	964,046
1	74	131,488	788,663
2	75	109,538	657,175
3	76	93,375·3	547,637·3
4	77	79,926·3	454,262·0
5	78	68,256·4	374,335·7
6	79	58,012·2	306,079·3
7	80	48,965·6	248,067·1
8	81	40,971·5	199,101·5
9	82	33,957·0	158,130·0
10	83	27,846·4	124,173·0
11	84	22,570·3	96,326·6
12	85	18,062·4	73,756·3
13	86	14,256·8	55,693·9
14	87	11,087·3	41,437·1
15	88	8,486·47	30,349·77
16	89	6,386·73	21,863·30
17	90	4,720·97	15,476·57
18	91	3,424·02	10,755·60
19	92	2,434·16	7,331·58
20	93	1,694·45	4,897·42
21	94	1,153·81	3,202·97
22	95	768·180	2,049·158
23	96	499·530	1,280·978
24	97	316·935	781·448
25	98	195·981	464·513
26	99	117·980	268·532
27	100	69·0652	150·5520
28	101	39·2693	81·4868
29	102	21·6606	42·2175
30	103	11·5766	20·5569
31	104	5·9874	8·9803
32	105	2·9929	2·9929

JOINT LIVES:—MALE AND FEMALE LIFE.

Female 35 Years older than Male.

Female 72 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 35 Years older.**	
0	35	863,789	11,574,294
1	36	693,312	10,710,505
2	37	622,408	10,017,193
3	38	575,824	9,394,785
4	39	539,028	8,818,961
5	40	507,574	8,279,933
6	41	479,887	7,772,359
7	42	454,860	7,292,472
8	43	431,738	6,837,612
9	44	410,297	6,405,874
10	45	390,256	5,995,577
11	46	371,386	5,605,321
12	47	353,501	5,233,935
13	48	336,450	4,880,434
14	49	320,115	4,543,984
15	50	304,402	4,223,869
16	51	289,241	3,919,467
17	52	274,582	3,630,226
18	53	260,390	3,355,644
19	54	246,642	3,095,254
20	55	232,974	2,848,612
21	56	219,608	2,615,638
22	57	206,683	2,396,030
23	58	194,196	2,189,347
24	59	182,142	1,995,151
25	60	170,513	1,813,009
26	61	159,298	1,642,496
27	62	148,486	1,483,198
28	63	138,069	1,334,712
29	64	128,036	1,196,643
30	65	118,380	1,068,607
31	66	109,096	950,227
32	67	100,180	841,131
33	68	91,630·4	740,950·9
34	69	83,449·9	649,320·5
35	70	75,641·9	565,870·6
36	71	68,212·2	490,228·7
37	72	61,168·3	422,016·5
38	73	54,518·4	360,848·2
39	74	48,271·5	306,329·8
40	75	42,436·0	258,058·3
41	76	37,019·3	215,622·3
42	77	32,026·8	178,603·0
43	78	27,461·3	146,576·2
44	79	23,322·2	119,114·9
45	80	19,604·9	95,792·7
46	81	16,300·5	76,187·8
47	82	13,395·7	59,887·3
48	83	10,872·4	46,491·6
49	84	8,708·47	35,619·17
50	85	6,878·01	26,910·70
51	86	5,352·09	20,032·69
52	87	4,097·37	14,680·60
53	88	3,084·64	10,583·23
54	89	2,281·55	7,498·59
55	90	1,656·41	5,217·04
56	91	1,179·18	3,560·63
57	92	822·265	2,381·445
58	93	561·028	1,559·180
59	94	374·109	998·152
60	95	243·518	624·043
61	96	154·541	380·525
62	97	95·4932	225·9839
63	98	57·3762	130·4907
64	99	33·4746	73·1145
65	100	18·9364	39·6399
66	101	10·3712	20·7035
67	102	5·4909	10·3323
68	103	2·8057	4·8414
69	104	1·3814	2·0357
70	105	·6543	·6543

Ages		$D_{x,\,y}$	$N_{x,}$
x	y	**Female 72 Years older.**	
0	72	191,586	1,094,300
1	73	144,539	902,714
2	74	121,229	758,175
3	75	104,100	636,946
4	76	89,811·2	532,845·5
5	77	77,350·3	443,034·3
6	78	66,341·0	365,684·0
7	79	56,542·6	299,343·0
8	80	47,805·4	242,800·4
9	81	40,062·2	194,995·0
10	82	33,242·5	154,932·8
11	83	27,283·8	121,690·3
12	84	22,126·6	94,406·5
13	85	17,712·5	72,279·9
14	86	13,981·5	54,567·4
15	87	10,871·6	40,585·9
16	88	8,318·72	29,714·29
17	89	6,257·60	21,395·57
18	90	4,622·86	15,137·97
19	91	3,350·66	10,515·11
20	92	2,380·32	7,164·45
21	93	1,655·76	4,784·13
22	94	1,127·26	3,128·37
23	95	750·367	2,001·112
24	96	487·861	1,250·745
25	97	309·478	762·884
26	98	191·337	453·406
27	99	115·165	262·069
28	100	67·4049	146·9041
29	101	38·3183	79·4992
30	102	21·1321	41·1809
31	103	11·2919	20·0488
32	104	5·8389	8·7569
33	105	2·9180	2·9180

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 36 Years older than Male.

Female 71 Years older than Male.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Female 36 Years older.**	
0	36	841,262	11,160,698
1	37	675,082	10,319,436
2	38	605,903	9,644,354
3	39	560,420	9,038,451
4	40	524,477	8,478,031
5	41	493,742	7,953,554
6	42	466,682	7,459,812
7	43	442,216	6,993,130
8	44	419,610	6,550,914
9	45	398,644	6,131,304
10	46	379,045	5,732,660
11	47	360,589	5,353,615
12	48	343,096	4,993,026
13	49	326,418	4,649,930
14	50	310,441	4,323,512
15	51	295,073	4,013,071
16	52	280,248	3,717,998
17	53	265,916	3,437,750
18	54	252,042	3,171,834
19	55	238,243	2,919,792
20	56	224,740	2,681,549
21	57	211,552	2,456,809
22	58	198,806	2,245,257
23	59	186,499	2,046,451
24	60	174,621	1,859,952
25	61	163,164	1,685,331
26	62	152,117	1,522,167
27	63	141,470	1,370,050
28	64	131,214	1,228,580
29	65	121,341	1,097,366
30	66	111,847	976,025
31	67	102,727	864,178
32	68	93,981·9	761,451·2
33	69	85,611·9	667,469·3
34	70	77,621·5	581,857·4
35	71	70,016·6	504,235·9
36	72	62,804·9	434,219·3
37	73	55,994·9	371,414·4
38	74	49,595·8	315,419·5
39	75	43,616·3	265,823·7
40	76	38,064·1	222,207·4
41	77	32,944·8	184,143·3
42	78	28,261·5	151,198·5
43	79	24,013·6	122,937·0
44	80	20,196·9	98,923·4
45	81	16,802·3	78,726·5
46	82	13,816·5	61,924·2
47	83	11,221·2	48,107·7
48	84	8,994·11	36,886·53
49	85	7,108·88	27,892·42
50	86	5,536·11	20,783·54
51	87	4,244·19	15,247·43
52	88	3,198·45	11,003·24
53	89	2,368·25	7,804·79
54	90	1,721·29	5,436·54
55	91	1,226·85	3,715·25
56	92	856·643	2,488·404
57	93	585·337	1,631·761
58	94	390·950	1,046·424
59	95	254·939	655·474
60	96	162·114	400·535
61	97	100·396	238·421
62	98	60·4724	138·0247
63	99	35·3787	77·5523
64	100	20·0750	42·1736
65	101	11·0321	22·0986
66	102	5·8627	11·0665
67	103	3·0080	5·2038
68	104	1·4877	2·1958
69	105	·7081	·7081

Female 71 Years older.

x	y	$D_{x, y}$	$N_{x, y}$
0	71	208,082	1,234,328
1	72	157,893	1,026,246
2	73	133,261	868,353
3	74	115,211	735,092
4	75	100,127	619,881
5	76	86,916·6	519,753·6
6	77	75,179·8	432,837·0
7	78	64,660·5	357,657·2
8	79	55,202·9	292,996·7
9	80	46,744·4	237,793·8
10	81	39,219·2	191,049·4
11	82	32,570·9	151,830·2
12	83	26,747·4	119,259·3
13	84	21,698·1	92,511·9
14	85	17,370·5	70,813·8
15	86	13,709·5	53,443·3
16	87	10,656·7	39,733·8
17	88	8,150·53	29,077·05
18	89	6,127·56	20,926·52
19	90	4,523·81	14,798·96
20	91	3,276·55	10,275·15
21	92	2,325·97	6,998·60
22	93	1,617·66	4,672·63
23	94	1,101·12	3,054·97
24	95	732·839	1,953·851
25	96	476·383	1,221·012
26	97	302·145	744·629
27	98	186·771	442·484
28	99	112·390	255·713
29	100	65·7725	143·3169
30	101	37·3832	77·5444
31	102	20·6123	40·1612
32	103	11·0118	19·5489
33	104	5·6928	8·5371
34	105	2·8443	2·8443

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 37 Years older than Male.

Female 70 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 37 Years older.**	
0	37	819,141	10,754,899
1	38	657,179	9,935,758
2	39	589,694	9,278,579
3	40	545,291	8,688,885
4	41	510,185	8,143,594
5	42	480,156	7,633,409
6	43	453,710	7,153,253
7	44	429,794	6,699,543
8	45	407,692	6,269,749
9	46	387,191	5,862,057
10	47	368,025	5,474,866
11	48	349,975	5,106,841
12	49	332,866	4,756,866
13	50	316,554	4,424,000
14	51	300,928	4,107,446
15	52	285,899	3,806,518
16	53	271,403	3,520,619
17	54	257,391	3,249,216
18	55	243,459	2,991,825
19	56	229,823	2,748,366
20	57	216,495	2,518,543
21	58	203,489	2,302,048
22	59	190,926	2,098,559
23	60	178,798	1,907,633
24	61	167,095	1,728,835
25	62	155,809	1,561,740
26	63	144,929	1,405,931
27	64	134,446	1,261,002
28	65	124,353	1,126,556
29	66	114,645	1,002,203
30	67	105,318	887,558
31	68	96,372·1	782,240·2
32	69	87,809·0	685,868·1
33	70	79,632·5	598,059·1
34	71	71,849·0	518,426·6
35	72	64,466·2	446,577·6
36	73	57,493·1	382,111·4
37	74	50,939·0	324,618·3
38	75	44,813·0	273,679·3
39	76	39,122·8	228,866·3
40	77	33,874·6	189,743·5
41	78	29,071·6	155,868·9
42	79	24,713·3	126,797·3
43	80	20,795·7	102,084·0
44	81	17,309·7	81,288·3
45	82	14,241·8	63,978·6
46	83	11,573·7	49,736·8
47	84	9,282·67	38,163·06
48	85	7,342·05	28,880·39
49	86	5,721·94	21,538·34
50	87	4,390·11	15,816·40
51	88	3,313·06	11,426·29
52	89	2,455·62	8,113·23
53	90	1,786·69	5,657·61
54	91	1,274·91	3,870·92
55	92	891·277	2,596·008
56	93	609·809	1,704·731
57	94	407·890	1,094·922
58	95	266·416	687·032
59	96	169·717	420·616
60	97	105·316	250·899
61	98	63·5774	145·5832
62	99	37·2879	82·0058
63	100	21·2169	44·7179
64	101	11·6954	23·5010
65	102	6·2363	11·8056
66	103	3·2117	5·5693
67	104	1·5950	2·3576
68	105	·7626	·7626

Female 70 Years older.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
0	70	224,799	1,384,054
1	71	171,487	1,159,255
2	72	145,573	987,768
3	73	126,646	842,195
4	74	110,813	715,549
5	75	96,899·5	604,735·7
6	76	84,477·6	507,836·2
7	77	73,275·3	423,358·6
8	78	63,128·4	350,083·3
9	79	53,977·7	286,954·9
10	80	45,760·9	232,977·2
11	81	38,426·8	187,216·3
12	82	31,930·6	148,789·5
13	83	26,229·4	116,858·9
14	84	21,279·0	90,629·5
15	85	17,032·5	69,350·5
16	86	13,438·5	52,318·0
17	87	10,441·2	38,879·5
18	88	7,981·15	28,438·27
19	89	5,996·28	20,457·12
20	90	4,423·75	14,460·84
21	91	3,201·73	10,037·09
22	92	2,272·44	6,835·36
23	93	1,580·15	4,562·92
24	94	1,075·40	2,982·77
25	95	715·597	1,907·370
26	96	465·095	1,191·773
27	97	294·934	726·678
28	98	182·281	431·744
29	99	109·674	249·463
30	100	64·1675	139·7894
31	101	36·4637	75·6219
32	102	20·1010	39·1582
33	103	10·7363	19·0572
34	104	5·5491	8·3209
35	105	2·7718	2·7718

JOINT LIVES :—Male and Female Life.

Female 38 Years older than Male.

Female 69 Years older than Male.

Female 38 Years older.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
0	38	797,418	10,356,790
1	39	639,598	9,559,372
2	40	573,775	8,919,774
3	41	530,432	8,345,999
4	42	496,146	7,815,567
5	43	466,809	7,319,421
6	44	440,964	6,852,612
7	45	417,587	6,411,648
8	46	395,980	5,994,061
9	47	375,935	5,598,081
10	48	357,192	5,222,146
11	49	339,540	4,864,954
12	50	322,806	4,525,414
13	51	306,853	4,202,608
14	52	291,571	3,895,755
15	53	276,876	3,604,184
16	54	262,703	3,327,308
17	55	248,626	3,064,605
18	56	234,855	2,815,979
19	57	221,392	2,581,124
20	58	208,244	2,359,732
21	59	195,424	2,151,488
22	60	183,042	1,956,064
23	61	171,092	1,773,022
24	62	159,563	1,601,930
25	63	148,446	1,442,367
26	64	137,733	1,293,921
27	65	127,416	1,156,188
28	66	117,490	1,028,772
29	67	107,952	911,282
30	68	98,802·4	803,329·7
31	69	90,042·2	704,527·3
32	70	81,676·1	614,485·1
33	71	73,710·5	532,809·0
34	72	66,153·3	459,098·5
35	73	59,013·9	392,945·2
36	74	52,301·9	333,931·3
37	75	46,026·6	281,629·4
38	76	40,196·2	235,602·8
39	77	34,816·8	195,406·6
40	78	29,892·1	160,589·8
41	79	25,421·7	130,697·7
42	80	21,401·6	105,276·0
43	81	17,822·9	83,874·4
44	82	14,671·8	66,051·5
45	83	11,929·9	51,379·7
46	84	9,574·25	39,449·83
47	85	7,577·61	29,875·58
48	86	5,909·62	22,297·97
49	87	4,537·47	16,388·35
50	88	3,426·97	11,850·88
51	89	2,543·62	8,423·91
52	90	1,852·61	5,880·29
53	91	1,323·35	4,027·68
54	92	926·187	2,704·332
55	93	634·464	1,778·145
56	94	424·943	1,143·681
57	95	277·960	718·738
58	96	177·357	440·778
59	97	110·255	263·421
60	98	66·6927	153·1657
61	99	39·2024	86·4730
62	100	22·3618	47·2706
63	101	12·3607	24·9088
64	102	6·6112	12·5481
65	103	3·4164	5·9369
66	104	1·7030	2·5205
67	105	·8175	·8175

Female 69 Years older.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
0	69	241,679	1,543,373
1	70	185,265	1,301,694
2	71	158,107	1,116,429
3	72	138,347	958,322
4	73	121,812	819,975
5	74	107,242	698,163
6	75	94,180·4	590,920·6
7	76	82,337·6	496,740·2
8	77	71,539·1	414,402·6
9	78	61,727·3	342,863·5
10	79	52,842·0	281,136·2
11	80	44,836·3	228,294·2
12	81	37,671·5	183,457·9
13	82	31,312·2	145,786·4
14	83	25,722·8	114,474·2
15	84	20,865·1	88,751·4
16	85	16,695·9	67,886·3
17	86	13,166·8	51,190·4
18	87	10,224·2	38,023·6
19	88	7,810·15	27,799·35
20	89	5,863·65	19,989·20
21	90	4,322·75	14,125·55
22	91	3,128·05	9,802·80
23	92	2,219·75	6,674·75
24	93	1,543·24	4.455·00
25	94	1,050·10	2,911·76
26	95	698·640	1,861·664
27	96	453·995	1,163·024
28	97	287·844	709·029
29	98	177·867	421·185
30	99	106·998	243·318
31	100	62·5892	136·3195
32	101	35·5593	73·7303
33	102	19·5981	38·1710
34	103	10·4651	18·5729
35	104	5·4075	8·1078
36	105	2·7003	2·7003

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 39 Years older than Male.

Female 68 Years older than Male.

Ages x	Ages y	$D_{x, y}$	$N_{x, y}$
		Female 39 Years older.	
0	39	776,086	9,966,272
1	40	622,332	9,190,186
2	41	558,140	8,567,854
3	42	515,836	8,009,714
4	43	482,355	7,493,878
5	44	453,696	7,011,523
6	45	428,440	6,557,827
7	46	405,590	6,129,387
8	47	384,468	5,723,797
9	48	364,869	5,339,329
10	49	346,542	4,974,460
11	50	329,279	4,627,918
12	51	312,914	4,298,639
13	52	297,313	3,985,725
14	53	282,369	3,688,412
15	54	268,000	3,406,043
16	55	253,757	3,138,043
17	56	239,839	2,884,286
18	57	226,239	2,644,447
19	58	212,954	2,418,208
20	59	199,990	2,205,254
21	60	187,354	2,005,264
22	61	175,153	1,817,910
23	62	163,379	1,642,757
24	63	152,023	1,479,378
25	64	141,076	1,327,355
26	65	130,531	1,186,279
27	66	120,384	1,055,748
28	67	110,631	935,364
29	68	101,274	824,733
30	69	92,312·9	723,459·1
31	70	83,753·4	631,146·2
32	71	75,602·1	547,392·8
33	72	67,867·2	471,790·7
34	73	60,558·4	403,923·5
35	74	53,685·4	343,365·1
36	75	47,258·1	289,679·7
37	76	41,284·8	242,421·6
38	77	35,772·0	201,136·8
39	78	30,723·5	165,364·8
40	79	26,139·2	134,641·3
41	80	22,015·1	108,502·1
42	81	18,342·2	86,487·0
43	82	15,106·8	68,144·8
44	83	12,290·2	53,038·0
45	84	9,868·97	40,747·82
46	85	7,815·63	30,878·85
47	86	6,099·22	23,063·22
48	87	4,686·31	16,964·00
49	88	3,542·00	12,277·69
50	89	2,631·07	8,735·69
51	90	1,919·00	6,104·62
52	91	1,372·18	4,185·62
53	92	961·381	2,813·435
54	93	659·314	1,852·054
55	94	442·124	1,192·740
56	95	289·581	750·616
57	96	185·042	461·035
58	97	115·218	275·993
59	98	69·8205	160·7750
60	99	41·1233	90·9545
61	100	23·5100	49·8312
62	101	13·0277	26·3212
63	102	6·9873	13·2935
64	103	3·6218	6·3062
65	104	1·8115	2·6844
66	105	·8729	·8729
		Female 68 Years older.	
0	68	258,669	1,712,130
1	69	199,176	1,453,461
2	70	170,809	1,254,285
3	71	150,258	1,083,476
4	72	133,066	933,218
5	73	117,886	800,152
6	74	104,232	682,266
7	75	91,794·6	578,034·2
8	76	80,386·7	486,239·6
9	77	69,951·3	405,852·9
10	78	60,428·5	335,901·6
11	79	51,774·3	275,473·1
12	80	43,955·0	223,698·8
13	81	36,941·8	179,743·8
14	82	30,707·5	142,802·0
15	83	25,222·4	112,094·5
16	84	20,452·7	86,872·1
17	85	16,358·3	66,419·4
18	86	12,893·2	50,061·1
19	87	10,005·2	37,167·9
20	88	7,637·40	27,162·69
21	89	5,729·76	19,525·29
22	90	4,223·26	13,795·53
23	91	3,055·51	9,572·27
24	92	2,167·90	6,516·76
25	93	1,506·93	4,348·86
26	94	1,025·21	2,841·93
27	95	681·967	1,816·720
28	96	443·082	1,134·753
29	97	280·873	691·671
30	98	173·526	410·798
31	99	104·366	237·272
32	100	61·0368	132·9060
33	101	34·6696	71·8692
34	102	19·1032	37·1996
35	103	10·1982	18·0964
36	104	5·2682	7·8982
37	105	2·6300	2·6300

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 40 Years older than Male.

Female 67 Years older than Male.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
		Female 40 Years older.	
0	40	755,135	9,583,241
1	41	605,374	8,828,106
2	42	542,781	8,222,732
3	43	501,497	7,679,951
4	44	468,805	7,178,454
5	45	440,810	6,709,649
6	46	416,132	6,268,839
7	47	393,799	5,852,707
8	48	373,151	5,458,908
9	49	353,990	5,085,757
10	50	336,069	4,731,767
11	51	319,189	4,395,698
12	52	303,185	4,076,509
13	53	287,929	3,773,324
14	54	273,317	3,485,395
15	55	258,874	3,212,078
16	56	244,788	2,953,204
17	57	231,040	2,708,416
18	58	217,617	2,477,376
19	59	204,513	2,259,759
20	60	191,732	2,055,246
21	61	179,279	1,863,514
22	62	167,258	1,684,235
23	63	155,659	1,516,977
24	64	144,475	1,361,318
25	65	133,699	1,216,843
26	66	123,327	1,083,144
27	67	113,356	959,817
28	68	103,787	846,461
29	69	94,621·9	742,674·0
30	70	85,865·5	648,052·1
31	71	77,524·9	562,186·6
32	72	69,608·9	484,661·7
33	73	62,127·3	415,052·8
34	74	55,090·4	352,925·5
35	75	48,508·2	297,835·1
36	76	42,389·4	249,326·9
37	77	36,740·9	206,937·5
38	78	31,566·4	170,196·6
39	79	26,866·3	138,630·2
40	80	22,636·4	111,763·9
41	81	18,868·0	89,127·5
42	82	15,547·0	70,259·5
43	83	12,654·6	54,712·5
44	84	10,167·0	42,057·9
45	85	8,056·21	31,890·92
46	86	6,290·80	23,834·71
47	87	4,836·66	17,543·91
48	88	3,658·18	12,707·25
49	89	2,719·39	9,049·07
50	90	1,984·98	6,329·68
51	91	1,421·35	4,344·70
52	92	996·850	2,923·351
53	93	684·367	1,926·501
54	94	459·441	1,242·134
55	95	301·289	782·693
56	96	192·778	481·404
57	97	120·211	288·626
58	98	72·9636	168·4152
59	99	43·0520	95·4516
60	100	24·6620	52·3996
61	101	13·6966	27·7376
62	102	7·3643	14·0410
63	103	3·8278	6·6767
64	104	1·9204	2·8489
65	105	·9285	·9285

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
		Female 67 Years older.	
0	67	275,727	1,890,162
1	68	213,178	1,614,435
2	69	183,635	1,401,257
3	70	162,330	1,217,622
4	71	144,523	1,055,292
5	72	128,777	910,769
6	73	114,578	781,992
7	74	101,592	667,414
8	75	89,619·6	565,821·8
9	76	78,602·5	476,202·2
10	77	68,479·5	397,599·7
11	78	59,207·6	329,120·2
12	79	50,756·6	269,912·6
13	80	43,103·6	219,156·0
14	81	36,228·4	176,052·4
15	82	30,110·1	139,824·0
16	83	24,723·9	109,713·9
17	84	20,039·1	84,990·0
18	85	16,018·3	64,950·9
19	86	12,616·9	48,932·6
20	87	9,783·88	36,315·66
21	88	7,463·02	26,531·78
22	89	5,597·90	19,068·76
23	90	4,125·33	13,470·86
24	91	2,984·14	9,345·53
25	92	2,116·89	6,361·39
26	93	1,471·22	4,244·50
27	94	1,000·75	2,773·28
28	95	665·573	1,772·526
29	96	432·351	1,106·953
30	97	274·019	674·602
31	98	169·258	400·583
32	99	101·778	231·325
33	100	59·5096	129·5465
34	101	33·7940	70·0369
35	102	18·6160	36·2429
36	103	9·9354	17·6269
37	104	5·1309	7·6915
38	105	2·5606	2·5606

JOINT LIVES:—MALE AND FEMALE LIFE.

Female 41 Years older than Male.

Female 66 Years older than Male.

Ages *x*	Ages *y*	$D_{x,\,y}$	$N_{x,\,y}$
		Female 41 Years older.	
0	41	734,558	9,207,603
1	42	588,716	8,473,045
2	43	527,693	7,884,329
3	44	487,409	7,356,636
4	45	455,490	6,869,227
5	46	428,146	6,413,737
6	47	404,034	5,985,591
7	48	382,207	5,581,557
8	49	362,025	5,199,350
9	50	343,292	4,837,325
10	51	325,771	4,494,033
11	52	309,265	4,168,262
12	53	293,616	3,858,997
13	54	278,699	3,565,381
14	55	264,010	3,286,682
15	56	249,724	3,022,672
16	57	235,808	2,772,948
17	58	222,235	2,537,140
18	59	208,991	2,314,905
19	60	196,069	2,105,914
20	61	183,468	1,909,845
21	62	171,198	1,726,377
22	63	159,354	1,555,179
23	64	147,930	1,395,825
24	65	136,921	1,247,895
25	66	126,320	1,110,974
26	67	116,128	984,654
27	68	106,344	868,526
28	69	96,970·2	762,182·4
29	70	88,013·2	665,212·2
30	71	79,479·9	577,199·0
31	72	71,379·3	497,719·1
32	73	63,721·7	426,339·8
33	74	56,517·7	362,618·1
34	75	49,777·7	306,100·4
35	76	43,510·7	256,322·7
36	77	37,723·9	212,812·0
37	78	32,421·3	175,088·1
38	79	27,603·4	142,666·8
39	80	23,266·1	115,063·4
40	81	19,400·5	91,797·3
41	82	15,992·6	72,396·8
42	83	13,023·3	56,404·2
43	84	10,468·4	43,380·9
44	85	8,299·48	32,912·54
45	86	6,484·45	24,613·06
46	87	4,988·58	18,128·61
47	88	3,775·55	13,140·03
48	89	2,808·58	9,364·48
49	90	2,051·60	6,555·90
50	91	1,470·22	4,504·30
51	92	1,032·57	3,034·08
52	93	709·616	2,001·507
53	94	476·899	1,291·891
54	95	313·090	814·992
55	96	200·572	501·902
56	97	125·237	301·330
57	98	76·1251	176·0925
58	99	44·9901	99·9674
59	100	25·8186	54·9773
60	101	14·3678	29·1587
61	102	7·7425	14·7909
62	103	4·0343	7·0484
63	104	2·0297	3·0141
64	105	·9844	·9844

Female 66 Years older.

Ages *x*	Ages *y*	$D_{x,\,y}$	$N_{x,\,y}$
0	66	292,820	2,077,275
1	67	227,236	1,784,455
2	68	196,544	1,557,219
3	69	174,519	1,360,675
4	70	156,134	1,186,156
5	71	139,865	1,030,022
6	72	125,164	890,157
7	73	111,675	764,993
8	74	99,184·7	653,317·9
9	75	87,630·5	554,133·2
10	76	76,948·7	466,502·7
11	77	67,095·9	389,554·0
12	78	58,043·8	322,458·1
13	79	49,773·5	264,414·3
14	80	42,271·2	214,640·8
15	81	35,523·6	172,369·6
16	82	29,514·9	136,846·0
17	83	24,224·0	107,331·1
18	84	19,622·7	83,107·1
19	85	15,675·2	63,484·4
20	86	12,337·9	47,809·2
21	87	9,560·48	35,471·33
22	88	7,291·27	25,910·85
23	89	5,468·09	18,619·58
24	90	4,028·96	13,151·49
25	91	2,913·93	9,122·53
26	92	2,066·73	6,208·60
27	93	1,436·11	4,141·87
28	94	976·690	2,705·756
29	95	649·455	1,729·066
30	96	421·801	1,079·611
31	97	267·279	657·810
32	98	165·060	390·531
33	99	99·2310	225·4705
34	100	58·0068	126·2395
35	101	32·9322	68·2327
36	102	18·1362	35·3005
37	103	9·6765	17·1643
38	104	4·9956	7·4878
39	105	2·4922	2·4922

JOINT LIVES :—Male and Female Life.

Female 42 Years older than Male.

Female 65 Years older than Male.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Female 42 Years older.**	
0	42	714,345	8,839,261
1	43	572,351	8,124,916
2	44	512,870	7,552,565
3	45	473,566	7,039,695
4	46	442,404	6,566,129
5	47	415,699	6,123,725
6	48	392,141	5,708,026
7	49	370,811	5,315,885
8	50	351,084	4,945,074
9	51	332,772	4,593,990
10	52	315,642	4,261,218
11	53	299,504	3,945,576
12	54	284,204	3,646,072
13	55	269,208	3,361,868
14	56	254,679	3,092,660
15	57	240,563	2,837,981
16	58	226,821	2,597,418
17	59	213,426	2,370,597
18	60	200,361	2,157,171
19	61	187,618	1,956,810
20	62	175,198	1,769,192
21	63	163,108	1,593,994
22	64	151,442	1,430,886
23	65	140,195	1,279,444
24	66	129,364	1,139,249
25	67	118,946	1,009,885
26	68	108,944	890,939
27	69	99,358·7	781,995·1
28	70	90,197·6	682,636·4
29	71	81,467·9	592,438·8
30	72	73,179·3	510,970·9
31	73	65,342·3	437,791·6
32	74	57,968·1	372,449·3
33	75	51,067·3	314,481·2
34	76	44,649·4	263,413·9
35	77	38,721·8	218,764·5
36	78	33,288·8	180,042·7
37	79	28,351·0	146,753·9
38	80	23,904·4	118,402·9
39	81	19,940·1	94,498·5
40	82	16,444·0	74,558·4
41	83	13,396·6	58,114·4
42	84	10,773·4	44,717·8
43	85	8,545·54	33,944·37
44	86	6,680·25	25,398·83
45	87	5,142·14	18,718·58
46	88	3,894·14	13,576·44
47	89	2,898·69	9,682·30
48	90	2,118·90	6,783·61
49	91	1,519·57	4,664·71
50	92	1,068·07	3,145·14
51	93	735·044	2,077·065
52	94	494·494	1,342·021
53	95	324·986	847·527
54	96	208·428	522·541
55	97	130·300	314·113
56	98	79·3078	183·8126
57	99	46·9395	104·5048
58	100	26·9809	57·5653
59	101	15·0416	30·5844
60	102	8·1218	15·5428
61	103	4·2415	7·4210
62	104	2·1392	3·1795
63	105	1·0403	1·0403

Female 65 Years older.

x	y	$D_{x, y}$	$N_{x, y}$
0	65	309,924	2,273,270
1	66	241,323	1,963,346
2	67	209,506	1,722,023
3	68	186,787	1,512,517
4	69	167,857	1,325,730
5	70	151,102	1,157,873
6	71	135,940	1,006,771
7	72	121,993	870,831
8	73	109,029	748,838
9	74	96,983·3	639,809·4
10	75	85,786·8	542,826·1
11	76	75,394·0	457,039·3
12	77	65,777·0	381,645·3
13	78	56,919·5	315,868·3
14	79	48,812·3	258,948·8
15	80	41,448·9	210,136·5
16	81	34,821·5	168,687·6
17	82	28,918·2	133,866·1
18	83	23,720·6	104,947·9
19	84	19,202·3	81,227·3
20	85	15,328·4	62,025·0
21	86	12,056·2	46,696·6
22	87	9,340·46	34,640·42
23	88	7,122·19	25,299·96
24	89	5,340·36	18,177·77
25	90	3,934·17	12,837·41
26	91	2,844·88	8,903·24
27	92	2,017·41	6,058·36
28	93	1,401·59	4,040·95
29	94	953·037	2,639·357
30	95	633·606	1,686·320
31	96	411·426	1,052·714
32	97	260·650	641·288
33	98	160·930	380·638
34	99	96·7251	219·7080
35	100	56·5274	122·9829
36	101	32·0835	66·4555
37	102	17·6636	34·3720
38	103	9·4214	16·7084
39	104	4·8622	7·2870
40	105	2·4248	2·4248

JOINT LIVES:—MALE AND FEMALE LIFE.

Female 43 Years older than Male.

Female 64 Years older than Male.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	Female 43 Years older.	
0	43	694,488	8,478,133
1	44	556,273	7,783,645
2	45	498,303	7,227,372
3	46	459,961	6,729,069
4	47	429,543	6,269,108
5	48	403,463	5,839,565
6	49	380,448	5,436,102
7	50	359,605	5,055,654
8	51	340,325	4,696,049
9	52	322,426	4,355,724
10	53	305,680	4,033,298
11	54	289,903	3,727,618
12	55	274,526	3,437,715
13	56	259,694	3,163,189
14	57	245,336	2,903,495
15	58	231,395	2,658,159
16	59	217,831	2,426,764
17	60	204,613	2,208,933
18	61	191,726	2,004,320
19	62	179,161	1,812,594
20	63	166,919	1,633,433
21	64	155,010	1,466,514
22	65	143,524	1,311,504
23	66	132,458	1,167,980
24	67	121,812	1,035,522
25	68	111,588	913,710
26	69	101,788	802,122
27	70	92,419·2	700,333·6
28	71	83,489·8	607,914·4
29	72	75,009·7	524,424·6
30	73	66,990·1	449,414·9
31	74	59,442·4	382,424·8
32	75	52,377·8	322,982·4
33	76	45,806·2	270,604·6
34	77	39,735·1	224,798·4
35	78	34,169·3	185,063·3
36	79	29,109·5	150,894·0
37	80	24,551·8	121,784·5
38	81	20,487·2	97,232·7
39	82	16,901·4	76,745·5
40	83	13,774·7	59,844·1
41	84	11,082·3	46,069·4
42	85	8,794·55	34,987·07
43	86	6,878·31	26,192·52
44	87	5,297·41	19,314·21
45	88	4,014·01	14,016·80
46	89	2,989·74	10,002·79
47	90	2,186·88	7,013·05
48	91	1,569·41	4,826·17
49	92	1,103·92	3,256·76
50	93	760·317	2,152·841
51	94	512·213	1,392·524
52	95	336·977	880·311
53	96	216·348	543·334
54	97	135·404	326·986
55	98	82·5142	191·5822
56	99	48·9019	109·0680
57	100	28·1499	60·1661
58	101	15·7187	32·0162
59	102	8·5027	16·2975
60	103	4·4493	7·7948
61	104	2·2490	3·3455
62	105	1·0965	1·0965

Female 64 Years older.

x	y	$D_{x, y}$	$N_{x, y}$
0	64	327,024	2,477,946
1	65	255,419	2,150,922
2	66	222,494	1,895,503
3	67	199,105	1,673,009
4	68	179,658	1,473,904
5	69	162,448	1,294,246
6	70	146,862	1,131,798
7	71	132,496	984,936
8	72	119,102	852,440
9	73	106,609	733,338
10	74	94,942·8	626,728·5
11	75	84,053·5	531,785·7
12	76	73,912·0	447,732·2
13	77	64,503·0	373,820·2
14	78	55,820·3	309,317·2
15	79	47,862·7	253,496·9
16	80	40,629·6	205,634·2
17	81	34,117·4	165,004·6
18	82	28,317·2	130,887·2
19	83	23,212·4	102,570·0
20	84	18,777·5	79,357·6
21	85	14,978·5	60,580·1
22	86	11,778·7	45,601·6
23	87	9,123·87	33,822·94
24	88	6,955·82	24,699·07
25	89	5,214·71	17,743·25
26	90	3,840·95	12,528·54
27	91	2,776·99	8,687·59
28	92	1,968·91	5,910·60
29	93	1,367·64	3,941·69
30	94	929·781	2,574·050
31	95	618·021	1,644·269
32	96	401·221	1,026·248
33	97	254·128	625·027
34	98	156·866	370·899
35	99	94·2583	214·0330
36	100	55·0707	119·7747
37	101	31·2475	64·7040
38	102	17·1979	33·4565
39	103	9·1698	16·2586
40	104	4·7306	7·0888
41	105	2·3582	2·3582

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 44 Years older than Male.

Female 63 Years older than Male.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Female 44 Years older.**	
0	44	674,979	8,124,123
1	45	540,474	7,449,144
2	46	483,988	6,908,670
3	47	446,589	6,424,682
4	48	416,899	5,978,093
5	49	391,433	5,561,194
6	50	368,951	5,169,761
7	51	348,585	4,800,810
8	52	329,744	4,452,225
9	53	312,250	4,122,481
10	54	295,881	3,810,231
11	55	280,030	3,514,350
12	56	264,823	3,234,320
13	57	250,167	2,969,497
14	58	235,986	2,719,330
15	59	222,223	2,483,344
16	60	208,836	2,261,121
17	61	195,795	2,052,285
18	62	183,083	1,856,490
19	63	170,695	1,673,407
20	64	158,632	1,502,712
21	65	146,904	1,344,080
22	66	135,603	1,197,176
23	67	124,726	1,061,573
24	68	114,276	936,847
25	69	104,258	822,571
26	70	94,678·8	718,313·0
27	71	85,546·3	623,634·2
28	72	76,871·4	538,087·9
29	73	68,665·7	461,216·5
30	74	60,941·4	392,550·8
31	75	53,710·0	331,609·4
32	76	46,981·7	277,899·4
33	77	40,764·6	230,917·7
34	78	35,063·6	190,153·1
35	79	29,879·5	155,089·5
36	80	25,208·7	125,210·0
37	81	21,042·0	100,001·3
38	82	17,365·1	78,959·3
39	83	14,157·9	61,594·2
40	84	11,395·0	47,436·3
41	85	9,046·64	36,041·29
42	86	7,078·73	26,994·65
43	87	5,454·47	19,915·92
44	88	4,135·22	14,461·45
45	89	3,081·77	10,326·23
46	90	2,255·57	7,244·46
47	91	1,619·76	4,988·89
48	92	1,140·13	3,369·13
49	93	785·838	2,228·999
50	94	529·824	1,443·161
51	95	349·051	913·337
52	96	224·330	564·286
53	97	140·549	339·956
54	98	85·7462	199·4074
55	99	50·8790	113·6612
56	100	29·3269	62·7822
57	101	16·3998	33·4553
58	102	8·8855	17·0555
59	103	4·6580	8·1700
60	104	2·3592	3·5120
61	105	1·1528	1·1528

Female 63 Years older.

x	y	$D_{x,y}$	$N_{x,y}$
0	63	344,109	2,691,090
1	64	269,511	2,346,981
2	65	235,490	2,077,470
3	66	211,448	1,841,980
4	67	191,505	1,630,532
5	68	173,867	1,439,027
6	69	157,889	1,265,160
7	70	143,141	1,107,271
8	71	129,357	964,130
9	72	116,459	834,773
10	73	104,366	718,314
11	74	93,024·5	613,947·5
12	75	82,401·2	520,923·0
13	76	72,480·4	438,521·8
14	77	63,257·3	366,041·4
15	78	54,734·4	302,784·1
16	79	46,916·7	248,049·7
17	80	39,808·1	201,133·0
18	81	33,408·4	161,324·9
19	82	27,710·5	127,916·5
20	83	22,699·0	100,206·0
21	84	18,348·8	77,507·0
22	85	14,633·7	59,158·2
23	86	11,505·6	44,524·5
24	87	8,910·74	33,018·87
25	88	6,792·17	24,108·13
26	89	5,091·15	17,315·96
27	90	3,749·28	12,224·81
28	91	2,710·23	8,475·53
29	92	1,921·23	5,765·30
30	93	1,334·27	3,844·07
31	94	906·911	2,509·803
32	95	602·693	1,602·892
33	96	391·182	1,000·199
34	97	247·710	609·017
35	98	152·865	361·307
36	99	91·8292	208·4418
37	100	53·6356	116·6126
38	101	30·4235	62·9770
39	102	16·7386	32·5535
40	103	8·9216	15·8149
41	104	4·6008	6·8933
42	105	2·2925	2·2925

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 45 Years older than Male.

Female 62 Years older than Male.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Female 45 Years older.**	
0	45	655,808	7,777,155
1	46	524,947	7,121,347
2	47	469,917	6,596,400
3	48	433,444	6,126,483
4	49	404,468	5,693,039
5	50	379,604	5,288,571
6	51	357,645	4,908,967
7	52	337,747	4,551,322
8	53	319,337	4,213,575
9	54	302,240	3,894,238
10	55	285,805	3,591,998
11	56	270,133	3,306,193
12	57	255,108	3,036,060
13	58	240,633	2,780,952
14	59	226,632	2,540,319
15	60	213,047	2,313,687
16	61	199,835	2,100,640
17	62	186,969	1,900,805
18	63	174,432	1,713,836
19	64	162,220	1,539,404
20	65	150,337	1,377,184
21	66	138,797	1,226,847
22	67	127,687	1,088,050
23	68	117,010	960,363
24	69	106,771	843,353
25	70	96,976·7	736,582·1
26	71	87,637·8	639,605·4
27	72	78,764·8	551,967·6
28	73	70,369·9	473,202·8
29	74	62,465·8	402,832·9
30	75	55,064·4	340,367·1
31	76	48,176·6	285,302·7
32	77	41,810·7	237,126·1
33	78	35,972·0	195,315·4
34	79	30,661·5	159,343·4
35	80	25,875·5	128,681·9
36	81	21,605·0	102,806·4
37	82	17,835·4	81,201·4
38	83	14,546·3	63,366·0
39	84	11,712·0	48,819·7
40	85	9,301·97	37,107·69
41	86	7,281·64	27,805·72
42	87	5,613·41	20,524·08
43	88	4,257·82	14,910·67
44	89	3,174·83	10,652·85
45	90	2,325·00	7,478·02
46	91	1,670·64	5,153·02
47	92	1,176·71	3,482·38
48	93	811·614	2,305·668
49	94	547·608	1,494·054
50	95	361·052	946·446
51	96	232·368	585·394
52	97	145·734	353·026
53	98	89·0044	207·2917
54	99	52·8719	118·2873
55	100	30·5125	65·4154
56	101	17·0855	34·9029
57	102	9·2705	17·8174
58	103	4·8677	8·5469
59	104	2·4699	3·6792
60	105	1·2093	1·2093

Female 62 Years older.

x	y	$D_{x, y}$	$N_{x, y}$
0	62	361,176	2,912,509
1	63	283,592	2,551,333
2	64	248,483	2,267,741
3	65	223,800	2,019,258
4	66	203,377	1,795,458
5	67	185,333	1,592,081
6	68	168,989	1,406,748
7	69	153,889	1,237,759
8	70	139,750	1,083,870
9	71	126,486	944,120
10	72	114,009	817,634
11	73	102,258	703,625
12	74	91,195·9	601,366·6
13	75	80,805·2	510,170·7
14	76	71,080·7	429,365·5
15	77	62,026·7	358,284·8
16	78	53,652·5	296,258·1
17	79	45,968·1	242,605·6
18	80	38,980·8	196,637·5
19	81	32,692·6	157,656·7
20	82	27,097·6	124,964·1
21	83	22,180·7	97,866·5
22	84	17,926·5	75,685·8
23	85	14,294·4	57,759·3
24	86	11,236·8	43,464·9
25	87	8,701·09	32,228·08
26	88	6,631·22	23,526·99
27	89	4,969·64	16,895·77
28	90	3,659·15	11,926·13
29	91	2,644·60	8,266·98
30	92	1,874·35	5,622·38
31	93	1,301·45	3,748·03
32	94	884·417	2,446·584
33	95	587·613	1,562·167
34	96	381·304	974·554
35	97	241·393	593·250
36	98	148·926	351·857
37	99	89·4363	202·9314
38	100	52·2213	113·4951
39	101	29·6111	61·2738
40	102	16·2857	31·6627
41	103	8·6768	15·3770
42	104	4·4726	6·7002
43	105	2·2276	2·2276

JOINT LIVES:—MALE AND FEMALE LIFE.

Female 46 Years older than Male.

Female 61 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 46 Years older.**	
0	46	636,968	7,437,143
1	47	509,685	6,800,175
2	48	456,085	6,290,490
3	49	420,519	5,834,405
4	50	392,245	5,413,886
5	51	367,971	5,021,641
6	52	346,525	4,653,670
7	53	327,087	4,307,145
8	54	309,100	3,980,058
9	55	291,947	3,670,958
10	56	275,704	3,379,011
11	57	260,223	3,103,307
12	58	245,386	2,843,084
13	59	231,095	2,597,698
14	60	217,274	2,366,603
15	61	203,865	2,149,329
16	62	190,827	1,945,464
17	63	178,134	1,754,637
18	64	165,771	1,576,503
19	65	153,737	1,410,732
20	66	142,040	1,256,995
21	67	130,695	1,114,955
22	68	119,787	984,260
23	69	109,324	864,473
24	70	99,313·4	755,148·5
25	71	89,764·9	655,835·1
26	72	80,690·5	566,070·2
27	73	72,103·2	485,379·7
28	74	64,016·0	413,276·5
29	75	56,441·7	349,260·5
30	76	49,391·5	292,818·8
31	77	42,874·1	243,427·3
32	78	36,895·1	200,553·2
33	79	31,455·9	163,658·1
34	80	26,552·7	132,202·2
35	81	22,176·5	105,649·5
36	82	18,312·6	83,473·0
37	83	14,940·2	65,160·4
38	84	12,033·3	50,220·2
39	85	9,560·70	38,186·91
40	86	7,487·16	28,626·21
41	87	5,774·31	21,139·05
42	88	4,381·89	15,364·74
43	89	3,268·96	10,982·85
44	90	2,395·21	7,713·89
45	91	1,722·06	5,318·68
46	92	1,213·67	3,596·62
47	93	837·653	2,382·946
48	94	565·570	1,545·293
49	95	373·172	979·723
50	96	240·358	606·551
51	97	150·956	366·193
52	98	92·2881	215·2367
53	99	54·8809	122·9486
54	100	31·7077	68·0677
55	101	17·7762	36·3600
56	102	9·6581	18·5838
57	103	5·0786	8·9257
58	104	2·5811	3·8471
59	105	1·2660	1·2660

Female 61 Years older.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
0	61	378,226	3,141,997
1	62	297,658	2,763,771
2	63	261,465	2,466,113
3	64	236,147	2,204,648
4	65	215,257	1,968,501
5	66	196,823	1,753,244
6	67	180,133	1,556,421
7	68	164,708	1,376,288
8	69	150,243	1,211,580
9	70	136,648	1,061,337
10	71	123,825	924,689
11	72	111,705	800,864
12	73	100,247	689,159
13	74	89,429·5	588,911·7
14	75	79,244·7	499,482·2
15	76	69,697·9	420,237·5
16	77	60,800·7	350,539·6
17	78	52,567·7	289,738·9
18	79	45,012·8	237,171·2
19	80	38,145·7	192,158·4
20	81	31,969·5	154,012·7
21	82	26,478·9	122,043·2
22	83	21,670·2	95,564·3
23	84	17,510·8	73,894·1
24	85	13,960·5	56,383·3
25	86	10,972·4	42,422·8
26	87	8,494·91	31,450·42
27	88	6,472·96	22,955·51
28	89	4,850·18	16,482·55
29	90	3,570·54	11,632·37
30	91	2,580·06	8,061·83
31	92	1,828·24	5,481·77
32	93	1,269·17	3,653·53
33	94	862·288	2,384·355
34	95	572·773	1,522·067
35	96	371·579	949·294
36	97	235·172	577·715
37	98	145·045	342·543
38	99	87·0780	197·4977
39	100	50·8269	110·4197
40	101	28·8098	59·5928
41	102	15·8386	30·7830
42	103	8·4350	14·9444
43	104	4·3459	6·5094
44	105	2·1635	2·1635

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 47 Years older than Male.

Female 60 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 47 Years older.**	
0	47	618,450	7,104,021
1	48	494,683	6,485,571
2	49	442,486	5,990,888
3	50	407,811	5,548,402
4	51	380,225	5,140,591
5	52	356,530	4,760,366
6	53	335,588	4,403,836
7	54	316,602	4,068,248
8	55	298,574	3,751,646
9	56	281,629	3,453,072
10	57	265,590	3,171,443
11	58	250,306	2,905,853
12	59	235,659	2,655,547
13	60	221,552	2,419,888
14	61	207,910	2,198,336
15	62	194,675	1,990,426
16	63	181,810	1,795,751
17	64	169,289	1,613,941
18	65	157,103	1,444,652
19	66	145,253	1,287,549
20	67	133,748	1,142,296
21	68	122,609	1,008,548
22	69	111,920	885,939
23	70	101,689	774,019
24	71	91,927·7	672,330·0
25	72	82,648·9	580,402·3
26	73	73,866·0	497,753·4
27	74	65,592·8	423,887·4
28	75	57,842·5	358,294·6
29	76	50,626·9	300,452·1
30	77	43,955·3	249,825·2
31	78	37,833·5	205,869·9
32	79	32,263·1	168,036·4
33	80	27,240·6	135,773·3
34	81	22,756·9	108,532·7
35	82	18,797·0	85,775·8
36	83	15,340·0	66,978·8
37	84	12,359·2	51,638·8
38	85	9,823·00	39,279·61
39	86	7,695·41	29,456·61
40	87	5,937·29	21,761·20
41	88	4,507·49	15,823·91
42	89	3,364·21	11,316·42
43	90	2,466·22	7,952·21
44	91	1,774·06	5,485·99
45	92	1,251·03	3,711·93
46	93	863·964	2,460·904
47	94	583·715	1,596·940
48	95	385·412	1,013·225
49	96	248·426	627·813
50	97	156·146	379·387
51	98	95·5951	223·2412
52	99	56·9057	127·6461
53	100	32·9125	70·7404
54	101	18·4725	37·8279
55	102	10·0486	19·3554
56	103	5·2909	9·3068
57	104	2·6929	4·0159
58	105	1·3230	1·3230
		Female 60 Years older.	
0	60	395,261	3,379,366
1	61	311,709	2,984,105
2	62	274,433	2,672,396
3	63	248,485	2,397,963
4	64	227,134	2,149,478
5	65	208,320	1,922,344
6	66	191,300	1,714,024
7	67	175,569	1,522,724
8	68	160,805	1,347,155
9	69	146,908	1,186,350
10	70	133,773	1,039,442
11	71	121,323	905,669
12	72	109,509	784,346
13	73	98,305·8	674,837·3
14	74	87,702·5	576,531·5
15	75	77,703·1	488,829·0
16	76	68,320·2	411,125·9
17	77	59,571·4	342,805·7
18	78	51,475·3	283,234·3
19	79	44,048·4	231,759·0
20	80	37,301·9	187,710·6
21	81	31,239·6	150,408·7
22	82	25,869·5	119,169·1
23	83	21,167·7	93,299·6
24	84	17,101·8	72,131·9
25	85	13,632·0	55,030·1
26	86	10,712·4	41,398·1
27	87	8,292·17	30,685·65
28	88	6,317·36	22,393·48
29	89	4,732·72	16,076·12
30	90	3,483·41	11,343·40
31	91	2,516·60	7,859·99
32	92	1,782·90	5,343·39
33	93	1,237·41	3,560·49
34	94	840·512	2,323·084
35	95	558·166	1,482·572
36	96	362·003	924·406
37	97	229·044	562·403
38	98	141·221	333·359
39	99	84·7528	192·1375
40	100	49·4514	107·3847
41	101	28·0190	57·9333
42	102	15·3973	29·9143
43	103	8·1961	14·5170
44	104	4·2208	6·3209
45	105	2·1001	2·1001

JOINT LIVES:—MALE AND FEMALE LIFE.

Female 48 Years older than Male.

Female 59 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 48 Years older.**	
0	48	600,245	6,777,713
1	49	479,933	6,177,468
2	50	429,114	5,697,535
3	51	395,314	5,268,421
4	52	368,404	4,873,107
5	53	345,277	4,504,703
6	54	324,831	4,159,426
7	55	305,820	3,834,595
8	56	288,022	3,528,775
9	57	271,298	3,240,753
10	58	255,468	2,969,455
11	59	240,385	2,713,987
12	60	225,928	2,473,602
13	61	212,004	2,247,674
14	62	198,537	2,035,670
15	63	185,476	1,837,133
16	64	172,783	1,651,657
17	65	160,438	1,478,874
18	66	148,433	1,318,436
19	67	136,774	1,170,003
20	68	125,474	1,033,229
21	69	114,556	907,755
22	70	104,103	793,199
23	71	94,126·4	689,095·9
24	72	84,640·3	594,969·5
25	73	75,658·8	510,329·2
26	74	67,196·5	434,670·4
27	75	59,267·2	367,473·9
28	76	51,883·4	308,206·7
29	77	45,054·8	256,323·3
30	78	38,787·6	211,268·5
31	79	33,083·7	172,480·9
32	80	27,939·7	139,397·2
33	81	23,346·5	111,457·5
34	82	19,288·9	88,111·0
35	83	15,745·7	68,822·1
36	84	12,689·9	53,076·4
37	85	10,089·0	40,386·5
38	86	7,906·54	30,297·50
39	87	6,102·43	22,390·96
40	88	4,634·71	16,288·53
41	89	3,460·65	11,653·82
42	90	2,538·09	8,193·17
43	91	1,826·66	5,655·08
44	92	1,288·81	3,828·42
45	93	890·559	2,539·609
46	94	602·050	1,649·050
47	95	397·777	1,047·000
48	96	256·574	649·223
49	97	161·388	392·649
50	98	98·8818	231·2606
51	99	58·9448	132·3788
52	100	34·1268	73·4340
53	101	19·1744	39·3072
54	102	10·4422	20·1328
55	103	5·5048	9·6906
56	104	2·8055	4·1858
57	105	1·3803	1·3803

Female 59 Years older.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
0	59	412,285	3,624,430
1	60	325,748	3,212,145
2	61	287,388	2,886,397
3	62	260,809	2,599,009
4	63	239,000	2,338,200
5	64	219,813	2,099,200
6	65	202,474	1,879,387
7	66	186,453	1,676,913
8	67	171,409	1,490,460
9	68	157,236	1,319,051
10	69	143,817	1,161,815
11	70	131,070	1,017,998
12	71	118,938	886,928
13	72	107,388	767,990
14	73	96,407·3	660,602·1
15	74	85,996·4	564,194·8
16	75	76,167·3	478,198·4
17	76	66,938·9	402,031·1
18	77	58,333·4	335,092·2
19	78	50,372·4	276,758·8
20	79	43,074·1	226,386·4
21	80	36,450·2	183,312·3
22	81	30,520·6	146,862·1
23	82	25,269·6	116,341·5
24	83	20,673·2	91,071·9
25	84	16,699·4	70,398·7
26	85	13,309·0	53,699·3
27	86	10,456·8	40,390·3
28	87	8,092·84	29,933·54
29	88	6,164·37	21,840·70
30	89	4,617·23	15,676·33
31	90	3,397·73	11,059·10
32	91	2,454·18	7,661·37
33	92	1,738·29	5,207·19
34	93	1,206·17	3,468·90
35	94	819·077	2,262·730
36	95	543·782	1,443·653
37	96	352·570	899·871
38	97	223·004	547·301
39	98	137·450	324·297
40	99	82·4592	186·8472
41	100	48·0940	104·3880
42	101	27·2382	56·2940
43	102	14·9613	29·0558
44	103	7·9601	14·0945
45	104	4·0971	6·1344
46	105	2·0373	2·0373

JOINT LIVES:—MALE AND FEMALE LIFE.

Female 49 Years older than Male.

Female 58 Years older than Male.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Female 49 Years older.**	
0	49	582,348	6,458,140
1	50	465,429	5,875,792
2	51	415,964	5,410,363
3	52	383,023	4,994,399
4	53	356,776	4,611,376
5	54	334,209	4,254,600
6	55	313,769	3,920,391
7	56	295,012	3,606,622
8	57	277,455	3,311,610
9	58	260,958	3,034,155
10	59	245,341	2,773,197
11	60	230,458	2,527,856
12	61	216,191	2,297,398
13	62	202,447	2,081,207
14	63	189,156	1,878,760
15	64	176,267	1,689,604
16	65	163,748	1,513,337
17	66	151,583	1,349,589
18	67	139,768	1,198,006
19	68	128,312	1,058,238
20	69	117,233	929,926
21	70	106,555	812,693
22	71	96,360·9	706,137·5
23	72	86,664·8	609,776·6
24	73	77,481·8	523,111·8
25	74	68,827·4	445,630·0
26	75	60,716·3	376,802·6
27	76	53,161·3	316,086·3
28	77	46,172·9	262,925·0
29	78	39,757·8	216,752·1
30	79	33,918·0	176,994·3
31	80	28,650·3	143,076·3
32	81	23,945·6	114,426·0
33	82	19,788·7	90,480·4
34	83	16,157·8	70,691·7
35	84	13,025·6	54,533·9
36	85	10,359·0	41,508·3
37	86	8,120·67	31,149·32
38	87.	6,269·85	23,028·65
39	88	4,763·62	16,758·80
40	89	3,558·32	11,995·18
41	90	2,610·84	8,436·86
42	91	1,879·89	5,826·02
43	92	1,327·02	3,946·13
44	93	917·450	2,619·113
45	94	620·583	1,701·663
46	95	410·272	1,081·080
47	96	264·806	670·808
48	97	166·681	406·002
49	98	102·201	239·321
50	99	60·9715	137·1195
51	100	35·3497	76·1480
52	101	19·8819	40·7983
53	102	10·8390	20·9164
54	103	5·7205	10·0774
55	104	2·9189	4·3569
56	105	1·4380	1·4380

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Female 58 Years older.**	
0	58	429,302	3,877,018
1	59	339,778	3,447,716
2	60	300,332	3,107,938
3	61	273,121	2,807,606
4	62	250,854	2,534,485
5	63	231,297	2,283,631
6	64	213,645	2,052,334
7	65	197,345	1,838,689
8	66	182,036	1,641,344
9	67	167,605	1,459,308
10	68	153,928	1,291,703
11	69	140,912	1,137,775
12	70	128,494	996,863
13	71	116,634	868,369
14	72	105,314	751,735
15	73	94,531·9	646,420·8
16	74	84,296·6	551,888·9
17	75	74,627·3	467,592·3
18	76	65,547·8	392,965·0
19	77	57,083·6	327,417·2
20	78	49,258·3	270,333·6
21	79	42,090·6	221,075·3
22	80	35,611·4	178,984·7
23	81	29,812·9	143,373·3
24	82	24,679·4	113,560·4
25	83	20,186·8	88,881·0
26	84	16,303·7	68,694·2
27	85	12,991·4	52,390·5
28	86	10,205·4	39,399·1
29	87	7,896·85	29,193·73
30	88	6,013·94	21,296·88
31	89	4,503·66	15,282·94
32	90	3,313·45	10,779·28
33	91	2,392·78	7,465·83
34	92	1,694·39	5,073·05
35	93	1,175·40	3,378·66
36	94	797·968	2,203·256
37	95	529·611	1,405·288
38	96	343·273	875·677
39	97	217·050	532·404
40	98	133·730	315·354
41	99	80·1958	181·6239
42	100	46·7538	101·4281
43	101	26·4670	54·6743
44	102	14·5305	28·2073
45	103	7·7268	13·6768
46	104	3·9747	5·9500
47	105	1·9753	1·9753

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 50 Years older than Male.

Female 51 Years older than Male.

Ages		$D_{x,\ y}$	$N_{x,\ y}$
x	y	**Female 50 Years older.**	
0	50	564,749	6,145,244
1	51	451,166	5,580,495
2	52	403,031	5,129,329
3	53	370,935	4,726,298
4	54	345,339	4,355,363
5	55	322,828	4,010,024
6	56	302,680	3,687,196
7	57	284,189	3,384,516
8	58	266,882	3,100,327
9	59	250,615	2,833,445
10	60	235,211	2,582,830
11	61	220,526	2,347,619
12	62	206,446	2,127,093
13	63	192,880	1,920,647
14	64	179,764	1,727,767
15	65	167,050	1,548,003
16	66	154,711	1,380,953
17	67	142,734	1,226,242
18	68	131,121	1,083,508
19	69	119,884	952,387
20	70	109,045	832,503
21	71	98,630·8	723,458·2
22	72	88,722·1	624,827·4
23	73	79,335·0	536,105·3
24	74	70,485·8	456,770·3
25	75	62,189·9	386,284·5
26	76	54,461·1	324,094·6
27	77	47,310·2	269,633·5
28	78	40,744·5	222,323·3
29	79	34,766·4	181,578·8
30	80	29,372·8	146,812·4
31	81	24,554·7	117,439·6
32	82	20,296·5	92,884·9
33	83	16,576·4	72,588·4
34	84	13,366·4	56,012·0
35	85	10,633·0	42,645·6
36	86	8,337·94	32,012·64
37	87	6,439·65	23,674·70
38	88	4,894·31	17,235·05
39	89	3,657·29	12,340·74
40	90	2,684·53	8,683·45
41	91	1,933·77	5,998·92
42	92	1,365·69	4,065·15
43	93	944·651	2,699·464
44	94	639·322	1,754·813
45	95	422·901	1,115·491
46	96	273·124	692·590
47	97	172·029	419·466
48	98	105·553	247·437
49	99	63·0181	141·8836
50	100	36·5651	78·8655
51	101	20·5943	42·3004
52	102	11·2389	21·7061
53	103	5·9378	10·4672
54	104	3·0332	4·5294
55	105	1·4962	1·4962

Ages		$D_{x,\ y}$	$N_{x,\ y}$
x	y	**Female 51 Years older.**	
0	51	547,443	5,838,949
1	52	437,139	5,291,506
2	53	390,311	4,854,367
3	54	359,044	4,464,056
4	55	333,579	4,105,012
5	56	311,418	3,771,433
6	57	291,575	3,460,015
7	58	273,359	3,168,440
8	59	256,303	2,895,081
9	60	240,266	2,638,778
10	61	225,073	2,398,512
11	62	210,585	2,173,439
12	63	196,690	1,962,854
13	64	183,304	1,766,164
14	65	170,364	1,582,860
15	66	157,831	1,412,496
16	67	145,680	1,254,665
17	68	133,904	1,108,985
18	69	122,509	975,081
19	70	111,511	852,572
20	71	100,935	741,061
21	72	90,812·1	640,125·6
22	73	81,218·4	549,313·5
23	74	72,171·7	468,095·1
24	75	63,688·4	395,923·4
25	76	55,782·9	332,235·0
26	77	48,466·9	276,452·1
27	78	41,748·1	227,985·2
28	79	35,629·2	186,237·1
29	80	30,107·5	150,607·9
30	81	25,173·9	120,500·4
31	82	20,812·7	95,326·5
32	83	17,001·8	74,513·8
33	84	13,712·7	57,512·0
34	85	10,911·3	43,799·3
35	86	8,558·50	32,888·03
36	87	6,611·95	24,329·53
37	88	5,026·86	17,717·58
38	89	3,757·63	12,690·72
39	90	2,759·20	8,933·09
40	91	1,988·35	6,173·89
41	92	1,404·83	4,185·54
42	93	972·177	2,780·709
43	94	658·276	1,808·532
44	95	435·671	1,150·256
45	96	281·531	714·585
46	97	177·432	433·054
47	98	108·940	255·622
48	99	65·0851	146·6817
49	100	37·7924	81·5966
50	101	21·3024	43·8042
51	102	11·6416	22·5018
52	103	6·1569	10·8602
53	104	3·1485	4·7033
54	105	1·5548	1·5548

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 52 Years older than Male.

Female 53 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 52 Years older.**		x	y	**Female 53 Years older.**	
0	52	530,422	5,539,185	0	53	513,681	5,245,868
1	53	423,342	5,008,763	1	54	409,771	4,732,187
2	54	377,799	4,585,421	2	55	364,933	4,322,416
3	55	346,817	4,207,622	3	56	334,560	3,957,483
4	56	321,789	3,860,805	4	57	309,984	3,622,923
5	57	299,994	3,539,016	5	58	288,561	3,312,939
6	58	280,463	3,239,022	6	59	269,346	3,024,378
7	59	262,523	2,958,559	7	60	251,683	2,755,032
8	60	245,720	2,696,036	8	61	235,129	2,503,349
9	61	229,911	2,450,316	9	62	219,547	2,268,220
10	62	214,928	2,220,405	10	63	204,771	2,048,673
11	63	200,634	2,005,477	11	64	190,672	1,843,902
12	64	186,924	1,804,843	12	65	177,150	1,653,230
13	65	173,719	1,617,919	13	66	164,132	1,476,080
14	66	160,962	1,444,200	14	67	151,566	1,311,948
15	67	148,618	1,283,238	15	68	139,423	1,160,382
16	68	136,667	1,134,620	16	69	127,691	1,020,959
17	69	125,109	997,953	17	70	116,371	893,268
18	70	113,953	872,844	18	71	105,478	776,897
19	71	103,218	758,891	19	72	95,036·1	671,418·6
20	72	92,934·0	655,672·9	20	73	85,074·0	576,382·5
21	73	83,131·6	562,738·9	21	74	75,625·4	491,308·5
22	74	73,885·0	479,607·3	22	75	66,759·7	415,683·1
23	75	65,211·7	405,722·3	23	76	58,493·3	348,923·4
24	76	57,127·0	340,510·6	24	77	50,839·4	290,430·1
25	77	49,643·3	283,383·6	25	78	43,806·8	239,590·7
26	78	42,768·8	233,740·3	26	79	37,399·3	195,783·9
27	79	36,506·8	190,971·5	27	80	31,614·7	158,384·6
28	80	30,854·7	154,464·7	28	81	26,443·9	126,769·9
29	81	25,803·5	123,610·0	29	82	21,871·3	100,326·0
30	82	21,337·6	97,806·5	30	83	17,873·9	78,454·7
31	83	17,434·3	76,468·9	31	84	14,422·4	60,580·8
32	84	14,064·6	59,034·6	32	85	11,481·2	46,158·4
33	85	11,194·0	44,970·0	33	86	9,010·02	34,677·18
34	86	8,782·48	33,776·02	34	87	6,964·47	25,667·16
35	87	6,786·85	24,993·54	35	88	5,297·89	18,702·69
36	88	5,161·36	18,206·69	36	89	3,962·66	13,404·80
37	89	3,859·40	13,045·33	37	90	2,911·67	9,442·14
38	90	2,834·89	9,185·93	38	91	2,099·73	6,530·47
39	91	2,043·66	6,351·04	39	92	1,484·66	4,430·74
40	92	1,444·49	4,307·38	40	93	1,028·27	2,946·08
41	93	1,000·04	2,862·89	41	94	696·877	1,917·809
42	94	677·458	1,862·854	42	95	461·659	1,220·932
43	95	448·588	1,185·396	43	96	298·631	759·273
44	96	290·032	736·808	44	97	188·417	460·642
45	97	182·894	446·776	45	98	115·820	272·225
46	98	112·362	263·882	46	99	69·2832	156·4049
47	99	67·1732	151·5203	47	100	40·2843	87·1217
48	100	39·0320	84·3471	48	101	22·7396	46·8374
49	101	22·0174	45·3151	49	102	12·4460	24·0978
50	102	12·0418	23·2977	50	103	6·5968	11·6518
51	103	6·3775	11·2559	51	104	3·3816	5·0550
52	104	3·2646	4·8784	52	105	1·6734	1·6734
53	105	1·6138	1·6138				

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 54 Years older than Male.

Female 55 Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 54 Years older.**		x	y	**Female 55 Years older.**	
0	54	497,214	4,958,901	0	55	480,282	4,678,079
1	55	395,817	4,461,687	1	56	381,828	4,197,797
2	56	352,036	4,065,870	2	57	339,121	3,815,969
3	57	322,286	3,713,834	3	58	310,003	3,476,848
4	58	298,171	3,391,548	4	59	286,352	3,166,845
5	59	277,123	3,093,377	5	60	265,680	2,880,493
6	60	258,224	2,816,254	6	61	247,095	2,614,813
7	61	240,836	2,558,030	7	62	229,979	2,367,718
8	62	224,530	2,317,194	8	63	213,920	2,137,739
9	63	209,172	2,092,664	9	64	198,787	1,923,819
10	64	194,604	1,883,492	10	65	184,429	1,725,032
11	65	180,703	1,688,888	11	66	170,730	1,540,603
12	66	167,374	1,508,185	12	67	157,603	1,369,873
13	67	154,551	1,340,811	13	68	144,989	1,212,270
14	68	142,189	1,186,260	14	69	132,850	1,067,281
15	69	130,266	1,044,071	15	70	121,168	934,431
16	70	118,772	913,805	16	71	109,940	813,263
17	71	107,717	795,033	17	72	99,177·9	703,322·6
18	72	97,116·8	687,315·9	18	73	88,903·1	604,144·7
19	73	86,998·3	590,199·1	19	74	79,143·1	515,241·6
20	74	77,392·5	503,200·8	20	75	69,929·0	436,098·5
21	75	68,332·3	425,808·3	21	76	61,292·5	366,169·5
22	76	59,881·9	357,476·0	22	77	53,291·1	304,877·0
23	77	52,055·4	297,594·1	23	78	45,935·3	251,585·9
24	78	44,862·3	245,538·7	24	79	39,230·1	205,650·6
25	79	38,307·1	200,676·4	25	80	33,173·7	166,420·5
26	80	32,387·6	162,369·3	26	81	27,757·7	133,246·8
27	81	27,095·3	129,981·7	27	82	22,966·2	105,489·1
28	82	22,414·1	102,886·4	28	83	18,775·7	82,522·9
29	83	18,321·0	80,472·3	29	84	15,155·9	63,747·2
30	84	14,786·1	62,151·3	30	85	12,070·1	48,591·3
31	85	11,773·2	47,365·2	31	86	9,476·28	36,521·15
32	86	9,241·24	35,592·02	32	87	7,328·27	27,044·87
33	87	7,144·91	26,350·78	33	88	5,577·39	19,716·60
34	88	5,436·54	19,205·87	34	89	4,173·93	14,139·21
35	89	4,067·48	13,769·33	35	90	3,068·66	9,965·28
36	90	2,989·57	9,701·85	36	91	2,214·29	6,896·62
37	91	2,156·59	6,712·28	37	92	1,566·71	4,682·33
38	92	1,525·39	4,555·69	38	93	1,085·87	3,115·62
39	93	1,056·87	3,030·30	39	94	736·476	2,029·749
40	94	716·546	1,973·430	40	95	488·295	1,293·273
41	95	474·892	1,256·884	41	96	316·143	804·978
42	96	307·333	781·992	42	97	199·656	488·835
43	97	194·003	474·659	43	98	122·855	289·179
44	98	119·318	280·656	44	99	73·5724	166·3242
45	99	71·4159	161·3384	45	100	42·8287	92·7518
46	100	41·5497	89·9225	46	101	24·2063	49·9231
47	101	23·4691	48·3728	47	102	13·2667	25·7168
48	102	12·8543	24·9037	48	103	7·0419	12·4501
49	103	6·8182	12·0494	49	104	3·6153	5·4082
50	104	3·4979	5·2312	50	105	1·7929	1·7929
51	105	1·7333	1·7333				

JOINT LIVES :—MALE AND FEMALE LIFE.

Female 56 Years older than Male.

Female 57* Years older than Male.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 56 Years older.**	
0	56	463,308	4,404,024
1	57	367,820	3,940,716
2	58	326,197	3,572,896
3	59	297,716	3,246,699
4	60	274,528	2,948,983
5	61	254,229	2,674,455
6	62	235,957	2,420,226
7	63	219,112	2,184,269
8	64	203,299	1,965,157
9	65	188,393	1,761,858
10	66	174,250	1,573,465
11	67	160,763	1,399,215
12	68	147,853	1,238,452
13	69	135,466	1,090,599
14	70	123,571	955,133
15	71	112,157	831,562
16	72	101,224	719,405
17	73	90,789·8	618,180·9
18	74	80,875·8	527,391·1
19	75	71,510·7	446,515·3
20	76	62,724·7	375,004·6
21	77	54,546·5	312,279·9
22	78	47,025·8	257,733·4
23	79	40,168·4	210,707·6
24	80	33,973·0	170,539·2
25	81	28,431·4	136,566·2
26	82	23,527·7	108,134·8
27	83	19,238·1	84,607·1
28	84	15,532·0	65,369·0
29	85	12,372·0	49,837·0
30	86	9,715·25	37,465·00
31	87	7,514·65	27,749·75
32	88	5,720·52	20,235·10
33	89	4,282·06	14,514·58
34	90	3,148·96	10,232·52
35	91	2,272·87	7,083·56
36	92	1,608·62	4,810·69
37	93	1,115·27	3,202·07
38	94	756·681	2,086·802
39	95	501·877	1,330·121
40	96	325·065	828·244
41	97	205·379	503·179
42	98	126·435	297·800
43	99	75·7537	171·3653
44	100	44·1219	95·6116
45	101	24·9515	51·4897
46	102	13·6834	26·5382
47	103	7·2678	12·8548
48	104	3·7339	5·5870
49	105	1·8531	1·8531

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Female 57* Years older.**	
0	57	446,311	4,136,942
1	58	353,802	3,690,631
2	59	313,267	3,336,829
3	60	285,422	3,023,562
4	61	262,696	2,738,140
5	62	242,769	2,475,444
6	63	224,807	2,232,675
7	64	208,233	2,007,868
8	65	192,669	1,799,635
9	66	177,995	1,606,966
10	67	164,079	1,428,971
11	68	150,818	1,264,892
12	69	138,142	1,114,074
13	70	126,005	975,932
14	71	114,382	849,927
15	72	103,266	735,545
16	73	92,663·3	632,278·9
17	74	82,592·2	539,615·6
18	75	73,076·4	457,023·4
19	76	64,143·4	383,947·0
20	77	55,821·0	319,803·6
21	78	48,133·5	263,982·6
22	79	41,121·9	215,849·1
23	80	34,785·6	174,727·2
24	81	29,116·5	139,941·6
25	82	24,098·7	110,825·1
26	83	19,708·5	86,726·4
27	84	15,914·6	67,017·9
28	85	12,679·1	51,103·3
29	86	9,958·25	38,424·20
30	87	7,704·15	28,465·95
31	88	5,866·02	20,761·80
32	89	4,391·96	14,895·78
33	90	3,230·55	10,503·82
34	91	2,332·35	7,273·27
35	92	1,651·18	4,940·92
36	93	1,145·11	3,289·74
37	94	777·175	2,144·627
38	95	515·646	1,367·452
39	96	334·107	851·806
40	97	211·176	517·699
41	98	130·059	306·523
42	99	77·9610	176·4642
43	100	45·4300	98·5032
44	101	25·7049	53·0732
45	102	14·1046	27·3683
46	103	7·4961	13·2637
47	104	3·8537	5·7676
48	105	1·9139	1·9139

* NOTE.—The Columns $D_{x,y}$ and $N_{x,y}$ for **Female 58 Years older than Male** are printed on page 350; and the corresponding Columns for **Female 59–105 Years Older** will be found by reading the Tables backwards from p. 349 to p. 303.

JOINT LIVES.

TWO MALES.

Interest 3 per Cent.

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	0			1			2	
Age of (x)	λ $D_{x,\,0}$	λ $N_{x,\,0}$	Age of (x)	λ $D_{x,\,1}$	λ $N_{x,\,1}$	Age of (x)	λ $D_{x,\,2}$	λ $N_{x,\,2}$
0	6·4181076	7·5173361	0	6·3341054	7·4989127	0	6·2988245	7·4854412
1	6·3341054	7·4989127	1	6·2501032	7·4813249	1	6·2148223	7·4681322
2	6·2988245	7·4854412	2	6·2148223	7·4681322	2	6·1795414	7·4550443
3	6·2767112	7·4733906	3	6·1927090	7·4562202	3	6·1574281	7·4431929
4	6·2598095	7·4619484	4	6·1758073	7·4448614	4	6·1405264	7·4318765
5	6·2455821	7·4508206	5	6·1615799	7·4337872	5	6·1262990	7·4208350
6	6·2332209	7·4398666	6	6·1492187	7·4228663	6	6·1139378	7·4099396
7	6·2220774	7·4289871	7	6·1380752	7·4120057	7	6·1027943	7·3990998
8	6·2116632	7·4181164	8	6·1276610	7·4011439	8	6·0923801	7·3882551
9	6·2019158	7·4072161	9	6·1179136	7·3902429	9	6·0826327	7·3773680
10	6·1926806	7·3962474	10	6·1086784	7·3792660	10	6·0733975	7·3664021
11	6·1838161	7·3851776	11	6·0998139	7·3681818	11	6·0645330	7·3553266
12	6·1751941	7·3739802	12	6·0911919	7·3569644	12	6·0559110	7·3441163
13	6·1666996	7·3626324	13	6·0826974	7·3455935	13	6·0474165	7·3327506
14	6·1582307	7·3511177	14	6·0742285	7·3340524	14	6·0389476	7·3212143
15	6·1496989	7·3394229	15	6·0656967	7·3223297	15	6·0304158	7·3094952
16	6·1410286	7·3275387	16	6·0570264	7·3104171	16	6·0217455	7·2975858
17	6·1321578	7·3154610	17	6·0481556	7·2983102	17	6·0128747	7·2854826
18	6·1230373	7·3031875	18	6·0390351	7·2860082	18	6·0037542	7·2731838
19	6·1136315	7·2907198	19	6·0296293	7·2735126	19	5·9943484	7·2606916
20	6·1039177	7·2780616	20	6·0199155	7·2608277	20	5·9846346	7·2480098
21	6·0938865	7·2652201	21	6·0098843	7·2479590	21	5·9746034	7·2351445
22	6·0837749	7·2522053	22	5·9997727	7·2349149	22	5·9644918	7·2221023
23	6·0735856	7·2390113	23	5·9895834	7·2216897	23	5·9543025	7·2088779
24	6·0633204	7·2256318	24	5·9793182	7·2082761	24	5·9440373	7·1954640
25	6·0529803	7·2120597	25	5·9689781	7·1946676	25	5·9336972	7·1818539
26	6·0425654	7·1982876	26	5·9585632	7·1808556	26	5·9232823	7·1680394
27	6·0320750	7·1843070	27	5·9480728	7·1668323	27	5·9127919	7·1540117
28	6·0215075	7·1701094	28	5·9375053	7·1525883	28	5·9022241	7·1397623
29	6·0108607	7·1556845	29	5·9268585	7·1381144	29	5·8915776	7·1252808
30	6·0001313	7·1410228	30	5·9161291	7·1233995	30	5·8808182	7·1105570
31	5·9893153	7·1261132	31	5·9053131	7·1084327	31	5·8700322	7·0955797
32	5·9784078	7·1109438	32	5·8944056	7·0932024	32	5·8591247	7·0803371
33	5·9674031	7·0955023	33	5·8834009	7·0776960	33	5·8481200	7·0648165
34	5·9562947	7·0797759	34	5·8722925	7·0618994	34	5·8370116	7·0490039
35	5·9450752	7·0637503	35	5·8610730	7·0457992	35	5·8257921	7·0328854
36	5·9337364	7·0474104	36	5·8497342	7·0293801	36	5·8144533	7·0164462
37	5·9222692	7·0307410	37	5·8382670	7·0126260	37	5·8029861	6·9996696
38	5·9106638	7·0137252	38	5·8266616	6·9955196	38	5·7913807	6·9825385
39	5·8989094	6·9963450	39	5·8149072	6·9780436	39	5·7796263	6·9650351
40	5·8869946	6·9785820	40	5·8029924	6·9601785	40	5·7677115	6·9471401
41	5·8749069	6·9604162	41	5·7909047	6·9419039	41	5·7556238	6·9288328
42	5·8626331	6·9418262	42	5·7786309	6·9231983	42	5·7433500	6·9100917
43	5·8501591	6·9227893	43	5·7661569	6·9040387	43	5·7308760	6·8908934
44	5·8374702	6·9032813	44	5·7534680	6·8844002	44	5·7181871	6·8712130
45	5·8245505	6·8832767	45	5·7405483	6·8642566	45	5·7052674	6·8510243
46	5·8113835	6·8627477	46	5·7273813	6·8435860	46	5·6921004	6·8302985
47	5·7979518	6·8416641	47	5·7139496	6·8223397	47	5·6786687	6·8090053
48	5·7842372	6·8199946	48	5·7002350	6·8005026	48	5·6649541	6·7871116
49	5·7702206	6·7977038	49	5·6862184	6·7780343	49	5·6509375	6·7645813
50	5·7558822	6·7747538	50	5·6718800	6·7548954	50	5·6365991	6·7413763
51	5·7412012	6·7511029	51	5·6571990	6·7310433	51	5·6219181	6·7174537
52	5·7259115	6·7267019	52	5·6419093	6·7064317	52	5·6066284	6·6927662
53	5·7101770	6·7015258	53	5·6261748	6·6810320	53	5·5908939	6·6672856
54	5·6939804	6·6755295	54	5·6099782	6·6547963	54	5·5746973	6·6409631

JOINT LIVES:—TWO MALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	0			1			2	
Age of (x)	$\lambda D_{x,\,0}$	$\lambda N_{x,\,0}$	**Age of (x)**	$\lambda D_{x,\,1}$	$\lambda N_{x,\,1}$	**Age of (x)**	$\lambda D_{x,\,2}$	$\lambda N_{x,\,2}$
55	5·6772945	6·6486594	55	5·5932923	6·6276726	55	5·5580114	6·6137447
56	5·6600816	6·6208593	56	5·5760794	6·5996005	56	5·5407985	6·5855724
57	5·6422936	6·5920655	57	5·5582914	6·5705168	57	5·5230105	6·5563795
58	5·6238721	6·5622088	58	5·5398699	6·5403509	58	5·5045890	6·5260967
59	5·6047485	6·5312133	59	5·5207463	6·5090264	59	5·4854654	6·4946468
60	5·5848437	6·4989987	60	5·5008415	6·4764602	60	5·4655606	6·4619469
61	5·5640084	6·4654766	61	5·4800662	6·4425647	61	5·4447853	6·4279073
62	5·5423229	6·4305527	62	5·4583207	6·4072439	62	5·4230398	6·3924333
63	5·5194972	6·3941253	63	5·4354950	6·3703957	63	5·4002141	6·3554219
64	5·4954710	6·3560866	64	5·4114688	6·3319107	64	5·3761879	6·3167638
65	5·4701136	6·3163210	65	5·3861114	6·2916731	65	5·3508305	6·2763421
66	5·4432840	6·2747043	66	5·3592818	6·2495589	66	5·3240009	6·2340331
67	5·4148309	6·2311065	67	5·3308287	6·2054356	67	5·2955478	6·1897053
68	5·3845928	6·1853872	68	5·3005906	6·1591643	68	5·2653097	6·1432175
69	5·3523975	6·1373984	69	5·2683953	6·1105961	69	5·2331141	6·0944233
70	5·3180629	6·0869849	70	5·2340607	6·0595744	70	5·1987798	6·0431646
71	5·2813963	6·0339812	71	5·1973941	6·0059339	71	5·1621132	5·9892758
72	5·2421947	5·9782102	72	5·1581925	5·9495007	72	5·1229116	5·9325834
73	5·2002450	5·9194897	73	5·1162428	5·8900883	73	5·0809619	5·8729035
74	5·1553234	5·8576250	74	5·0713212	5·8275037	74	5·0360403	5·8100409
75	5·1071961	5·7924113	75	5·0231939	5·7615437	75	4·9879130	5·7437922
76	5·0556187	5·7236346	76	4·9716165	5·6919930	76	4·9363356	5·6739446
77	5·0003368	5·6510705	77	4·9163346	5·6186283	77	4·8810537	5·6002737
78	4·9410854	5·5744813	78	4·8570832	5·5412143	78	4·8218023	5·5225454
79	4·8775893	5·4936228	79	4·7935871	5·4595048	79	4·7583062	5·4405138
80	4·8095629	5·4082366	80	4·7255607	5·3732437	80	4·6902798	5·3539232
81	4·7367103	5·3180537	81	4·6527081	5·2821631	81	4·6174272	5·2625064
82	4·6587252	5·2227948	82	4·5747230	5·1859839	82	4·5394421	5·1659849
83	4·5752913	5·1221683	83	4·4912891	5·0844165	83	4·4560082	5·0640692
84	4·4860815	5·0158726	84	4·4020793	4·9771587	84	4·3667981	4·9564590
85	4·3907587	4·9035913	85	4·3067565	4·8638996	85	4·2714756	4·8428407
86	4·2889753	4·7849994	86	4·2049731	4·7443118	86	4·1696922	4·7228930
87	4·1803735	4·6597594	87	4·0963713	4·6180596	87	4·0610904	4·5962770
88	4·0645851	4·5275229	88	3·9805829	4·4847968	88	3·9453020	4·4626471
89	3·9412317	4·3879267	89	3·8572295	4·3441621	89	3·8219486	4·3216434
90	3·8099242	4·2405980	90	3·7259220	4·1957838	90	3·6906411	4·1728947
91	3·6702637	4·0851499	91	3·5862615	4·0392769	91	3·5509806	4·0160166
92	3·5218406	3·9211843	92	3·4378384	3·8742423	92	3·4025575	3·8506113
93	3·3642351	3·7482865	93	3·2802329	3·7002692	93	3·2449520	3·6762655
94	3·1970170	3·5660260	94	3·1130148	3·5169252	94	3·0777339	3·4925509
95	3·0197459	3·3739523	95	2·9357437	3·3237611	95	2·9004628	3·2990130
96	2·8319710	3·1715834	96	2·7479688	3·1202916	96	2·7126879	3·0951690
97	2·6332311	2·9583957	97	2·5492289	2·9059863	97	2·5139480	2·8804849
98	2·4230548	2·7337869	98	2·3390526	2·6802294	98	2·3037717	2·6543392
99	2·2009604	2·4970112	99	2·1169582	2·4422476	99	2·0816773	2·4159477
100	1·9664556	2·2470345	100	1·8824534	2·1909435	100	1·8471725	2·1641916
101	1·7190381	1·9822043	101	1·6350359	1·9245424	101	1·5997550	1·8972476
102	1·4581951	1·6994501	102	1·3741929	1·6396916	102	1·3389120	1·6116744
103	1·1834035	1·3921339	103	1·0994013	1·3290845	103	1·0641204	1·2999625
104	0·8941299	1·0430320	104	0·8101277	0·9737419	104	0·7748468	0·9426379
105	0·5898305		105	0·5058283		105	0·4705474	
106	0·2699513		106	0·1859191		106	0·1506682	
107	9·9339279		107	9·8499257		107	9·8146448	
108	9·5811856		108	9·4971834		108	9·4619025	
109	9·2111393		109	9·1271371		109	9·0918562	

JOINT LIVES :—TWO MALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	3			4			5	
Age of (x)	λ $D_{x,\,3}$	λ $N_{x,\,3}$	Age of (x)	λ $D_{x,\,4}$	λ $N_{x,\,4}$	Age of (x)	λ $D_{x,\,5}$	λ $N_{x,\,5}$
0	6·2767112	7·4733906	0	6·2598095	7·4619484	0	6·2455821	7·4508206
1	6·1927090	7·4562202	1	6·1758073	7·4448614	1	6·1615799	7·4337872
2	6·1574281	7·4431929	2	6·1405264	7·4318765	2	6·1262990	7·4208350
3	6·1353148	7·4313817	3	6·1184131	7·4200979	3	6·1041857	7·4090845
4	6·1184131	7·4200979	4	6·1015114	7·4088427	4	6·0872840	7·3978558
5	6·1041857	7·4090845	5	6·0872840	7·3978558	5	6·0730566	7·3868955
6	6·0918245	7·3982141	6	6·0749228	7·3870108	6	6·0606954	7·3760760
7	6·0806810	7·3873969	7	6·0637793	7·3762180	7	6·0495519	7·3653086
8	6·0702668	7·3765733	8	6·0533651	7·3654177	8	6·0391377	7·3545337
9	6·0605194	7·3657057	9	6·0436177	7·3545728	9	6·0293903	7·3437138
10	6·0512842	7·3547577	10	6·0343825	7·3436469	10	6·0201551	7·3328126
11	6·0424197	7·3436992	11	6·0255180	7·3326095	11	6·0112906	7·3217997
12	6·0337977	7·3325047	12	6·0168960	7·3214358	12	6·0026686	7·3106498
13	6·0253032	7·3211545	13	6·0084015	7·3101058	13	5·9941741	7·2993433
14	6·0168343	7·3096323	14	5·9999326	7·2986037	14	5·9857052	7·2878649
15	6·0083025	7·2979274	15	5·9914008	7·2869184	15	5·9771734	7·2762028
16	5·9996322	7·2860321	16	5·9827305	7·2750424	16	5·9685031	7·2643498
17	5·9907614	7·2739426	17	5·9738597	7·2629719	17	5·9596323	7·2523021
18	5·9816409	7·2616575	18	5·9647392	7·2507061	18	5·9505118	7·2400591
19	5·9722351	7·2491788	19	5·9553334	7·2382464	19	5·9411060	7·2276222
20	5·9625213	7·2365106	20	5·9456196	7·2255969	20	5·9313922	7·2149953
21	5·9524901	7·2236582	21	5·9355884	7·2127633	21	5·9213610	7·2021836
22	5·9423785	7·2106288	22	5·9254768	7·1997516	22	5·9112494	7·1891943
23	5·9321892	7·1974159	23	5·9152875	7·1865566	23	5·9010601	7·1760204
24	5·9219240	7·1840131	24	5·9050223	7·1731708	24	5·8907949	7·1626558
25	5·9115839	7·1704131	25	5·8946822	7·1595874	25	5·8804548	7·1490928
26	5·9011690	7·1566079	26	5·8842673	7·1457979	26	5·8700399	7·1353238
27	5·8906786	7·1425891	27	5·8737769	7·1317941	27	5·8595495	7·1213398
28	5·8801111	7·1283472	28	5·8632094	7·1175670	28	5·8489820	7·1071316
29	5·8694643	7·1138725	29	5·8525626	7·1031059	29	5·8383352	7·0926895
30	5·8587349	7·0991545	30	5·8418332	7·0884012	30	5·8276058	7·0780027
31	5·8479189	7·0841818	31	5·8310172	7·0734412	31	5·8167898	7·0630601
32	5·8370114	7·0689428	32	5·8201097	7·0582138	32	5·8058823	7·0478497
33	5·8260067	7·0534242	33	5·8091050	7·0427062	33	5·7948776	7·0323589
34	5·8148983	7·0376133	34	5·7979966	7·0269053	34	5·7837692	7·0165737
35	5·8036788	7·0214953	35	5·7867771	7·0107963	35	5·7725497	7·0004797
36	5·7923400	7·0050543	36	5·7754383	6·9943644	36	5·7612109	6·9840625
37	5·7808728	6·9882753	37	5·7639711	6·9775926	37	5·7497437	6·9673050
38	5·7692674	6·9711405	38	5·7523657	6·9604645	38	5·7381383	6·9501899
39	5·7575130	6·9536318	39	5·7406113	6·9429616	39	5·7263839	6·9326998
40	5·7455982	6·9357299	40	5·7286965	6·9250643	40	5·7144691	6·9148146
41	5·7335105	6·9174143	41	5·7166088	6·9067523	41	5·7023814	6·8965139
42	5·7212367	6·8986630	42	5·7043350	6·8880038	42	5·6901076	6·8777757
43	5·7087627	6·8794529	43	5·6918610	6·8687949	43	5·6776336	6·8585768
44	5·6960738	6·8597589	44	5·6791721	6·8491013	44	5·6649447	6·8388918
45	5·6831541	6·8395545	45	5·6662524	6·8288957	45	5·6520250	6·8186946
46	5·6699871	6·8188110	46	5·6530854	6·8081500	46	5·6388580	6·7979559
47	5·6565554	6·7974978	47	5·6396537	6·7868332	47	5·6254263	6·7766452
48	5·6428408	6·7755818	48	5·6259391	6·7649116	48	5·6117117	6·7547292
49	5·6288242	6·7530270	49	5·6119225	6·7423501	49	5·5976951	6·7321716
50	5·6144858	6·7297941	50	5·5975841	6·7191090	50	5·5833567	6·7089338
51	5·5998048	6·7058415	51	5·5829031	6·6951456	51	5·5686757	6·6849728
52	5·5845151	6·6811218	52	5·5676134	6·6704140	52	5·5533860	6·6602415
53	5·5687806	6·6556047	53	5·5518789	6·6448832	53	5·5376515	6·6347103
54	5·5525840	6·6292426	54	5·5356823	6·6185042	54	5·5214549	6·6083296

JOINT LIVES:—TWO MALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	3			4			5	
Age of (x)	$\lambda D_{x,\,3}$	$\lambda N_{x,\,3}$	Age of (x)	$\lambda D_{x,\,4}$	$\lambda N_{x,\,4}$	Age of (x)	$\lambda D_{x,\,5}$	$\lambda N_{x,\,5}$
55	5·5358981	6·6019810	55	5·5189964	6·5912239	55	5·5047690	6·5810451
56	5·5186852	6·5737604	56	5·5017835	6·5629819	56	5·4875561	6·5527977
57	5·5008972	6·5445163	57	5·4839955	6·5337126	57	5·4697681	6·5235211
58	5·4824757	6·5141762	58	5·4655740	6·5033457	58	5·4513466	6·4931437
59	5·4633521	6·4826645	59	5·4464504	6·4718023	59	5·4322230	6·4615892
60	5·4434473	6·4498975	60	5·4265456	6·4390007	60	5·4123182	6·4287725
61	5·4226720	6·4157859	61	5·4057703	6·4048508	61	5·3915429	6·3946055
62	5·4009265	6·3802333	62	5·3840248	6·3692566	62	5·3697974	6·3589911
63	5·3781008	6·3431381	63	5·3611991	6·3321145	63	5·3469717	6·3218266
64	5·3540746	6·3043900	64	5·3371729	6·2933161	64	5·3229455	6·2830019
65	5·3287172	6·2638722	65	5·3118155	6·2527441	65	5·2975881	6·2424006
66	5·3018876	6·2214607	66	5·2849859	6·2102735	66	5·2707585	6·1998983
67	5·2734345	6·1770241	67	5·2565328	6·1657733	67	5·2423054	6·1553621
68	5·2431964	6·1304222	68	5·2262947	6·1191034	68	5·2120673	6·1086530
69	5·2110011	6·0815057	69	5·1940994	6·0701159	69	5·1798720	6·0596225
70	5·1766665	6·0301203	70	5·1597648	6·0186527	70	5·1455374	6·0081145
71	5·1399999	5·9760986	71	5·1230982	5·9645505	71	5·1088708	5·9539620
72	5·1007983	5·9192664	72	5·0838966	5·9076338	72	5·0696692	5·8969933
73	5·0588486	5·8594409	73	5·0419469	5·8477182	73	5·0277195	5·8370225
74	5·0139270	5·7964286	74	4·9970253	5·7846124	74	4·9827979	5·7738568
75	4·9657997	5·7300241	75	4·9488980	5·7181117	75	4·9346706	5·7072941
76	4·9142223	5·6600162	76	4·8973206	5·6480031	76	4·8830932	5·6371207
77	4·8589404	5·5861801	77	4·8420387	5·5740637	77	4·8278113	5·5631132
78	4·7996890	5·5082822	78	4·7827873	5·4960591	78	4·7685599	5·4850388
79	4·7361929	5·4260775	79	4·7192912	5·4137449	79	4·7050638	5·4026521
80	4·6681665	5·3393101	80	4·6512648	5·3268660	80	4·6370374	5·3156983
81	4·5953139	5·2477136	81	4·5784122	5·2351556	81	4·5641848	5·2239119
82	4·5173288	5·1510098	82	4·5004271	5·1383365	82	4·4861997	5·1270148
83	4·4338949	5·0489096	83	4·4169932	5·0361197	83	4·4027658	5·0247188
84	4·3446851	4·9411127	84	4·3277834	4·9282048	84	4·3135560	4·9167239
85	4·2493623	4·8273072	85	4·2324606	4·8142802	85	4·2182332	4·8027183
86	4·1475789	4·7071689	86	4·1306772	4·6940232	86	4·1164498	4·6823798
87	4·0389771	4·5803650	87	4·0220754	4·5670982	87	4·0078480	4·5553726
88	3·9231887	4·4465450	88	3·9062870	4·4331599	88	3·8920596	4·4213522
89	3·7998353	4·3053518	89	3·7829336	4·2918476	89	3·7687062	4·2799584
90	3·6685278	4·1564135	90	3·6516261	4·1427911	90	3·6373987	4·1308203
91	3·5288673	3·9993472	91	3·5119656	3·9856061	91	3·4977382	3·9735550
92	3·3804442	3·8337544	92	3·3635425	3·8198965	92	3·3493151	3·8077636
93	3·2228387	3·6592229	93	3·2059370	3·6452493	93	3·1917096	3·6330370
94	3·0556206	3·4753210	94	3·0387189	3·4612343	94	3·0244915	3·4489427
95	2·8783495	3·2815996	95	2·8614478	3·2673972	95	2·8472204	3·2550276
96	2·6905746	3·0775707	96	2·6736729	3·0632553	96	2·6594455	3·0508072
97	2·4918347	2·8627001	97	2·4749330	2·8482698	97	2·4607056	2·8357438
98	2·2816584	2·6363635	98	2·2647567	2·6218158	98	2·2505293	2·6092090
99	2·0595640	2·3977698	99	2·0426623	2·3830987	99	2·0284349	2·3704057
100	1·8250592	2·1457920	100	1·8081575	2·1309837	100	1·7939301	2·1181950
101	1·5776417	1·8785827	101	1·5607400	1·8636095	101	1·5465126	1·8507081
102	1·3167987	1·5926508	102	1·2998970	1·5774631	102	1·2856696	1·5644116
103	1·0420071	1·2804076	103	1·0251054	1·2648933	103	1·0108780	1·2516285
104	0·7527335	0·9222011	104	0·7358318	0·9061680	104	0·7216044	0·8925454
105	0·4484341		105	0·4315324		105	0·4173050	
106	0·1285549		106	0·1116532		106	0·0974258	
107	9·7925315		107	9·7756298		107	9·7614024	
108	9·4397892		108	9·4228875		108	9·4086601	
109	9·0697429		109	9·0528412		109	9·0386138	

JOINT LIVES :—TWO MALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	6			7			8	
Age of (x)	λ $D_{x,\,6}$	λ $N_{x,\,6}$	Age of (x)	λ $D_{x,\,7}$	λ $N_{x,\,7}$	Age of (x)	λ $D_{x,\,8}$	λ $N_{x,\,8}$
0	6·2332209	7·4398666	0	6·2220774	7·4289871	0	6·2116632	7·4181164
1	6·1492187	7·4228663	1	6·1380752	7·4120057	1	6·1276610	7·4011439
2	6·1139378	7·4099396	2	6·1027943	7·3990998	2	6·0923801	7·3882551
3	6·0918245	7·3982141	3	6·0806810	7·3873969	3	6·0702668	7·3765733
4	6·0749228	7·3870108	4	6·0637793	7·3762180	4	6·0533651	7·3654177
5	6·0606954	7·3760760	5	6·0495519	7·3653086	5	6·0391377	7·3545337
6	6·0483342	7·3652828	6	6·0371907	7·3545419	6	6·0267765	7·3437937
7	6·0371907	7·3545419	7	6·0260472	7·3438283	7	6·0156330	7·3331077
8	6·0267765	7·3437937	8	6·0156330	7·3331077	8	6·0052188	7·3224160
9	6·0170291	7·3330005	9	6·0058856	7·3223425	9	5·9954714	7·3116799
10	6·0077939	7·3221261	10	5·9966504	7·3114965	10	5·9862362	7·3008631
11	5·9989294	7·3111397	11	5·9877859	7·3005385	11	5·9773717	7·2899351
12	5·9903074	7·3000164	12	5·9791639	7·2894438	12	5·9687497	7·2788704
13	5·9818129	7·2887362	13	5·9706694	7·2781922	13	5·9602552	7·2676487
14	5·9733140	7·2772838	14	5·9622005	7·2667678	14	5·9517863	7·2562546
15	5·9648122	7·2656478	15	5·9536687	7·2551601	15	5·9432545	7·2446769
16	5·9561419	7·2538207	16	5·9449984	7·2433610	16	5·9345842	7·2329080
17	5·9472711	7·2417989	17	5·9361276	7·2313674	17	5·9257134	7·2209440
18	5·9381506	7·2295816	18	5·9270071	7·2191775	18	5·9165929	7·2087841
19	5·9287448	7·2171698	19	5·9176013	7·2067938	19	5·9071871	7·1964299
20	5·9190310	7·2045682	20	5·9078875	7·1942198	20	5·8974733	7·1838854
21	5·9089998	7·1917820	21	5·8978563	7·1814609	21	5·8874421	7·1711558
22	5·8988882	7·1788172	22	5·8877447	7·1685237	22	5·8773305	7·1582478
23	5·8886989	7·1656680	23	5·8775554	7·1554013	23	5·8671412	7·1451548
24	5·8784337	7·1523278	24	5·8672902	7·1420878	24	5·8568760	7·1318698
25	5·8680936	7·1387885	25	5·8569501	7·1285750	25	5·8465359	7·1183858
26	5·8576787	7·1250429	26	5·8465352	7·1148554	26	5·8361210	7·1046943
27	5·8471883	7·1110820	27	5·8360448	7·1009204	27	5·8256306	7·0907873
28	5·8366208	7·0968965	28	5·8254773	7·0867601	28	5·8150631	7·0766550
29	5·8259740	7·0824766	29	5·8148305	7·0723654	29	5·8044163	7·0622875
30	5·8152446	7·0678119	30	5·8041011	7·0577255	30	5·7936869	7·0476747
31	5·8044286	7·0528905	31	5·7932851	7·0428286	31	5·7828709	7·0328044
32	5·7935211	7·0377013	32	5·7823776	7·0276631	32	5·7719634	7·0176656
33	5·7825164	7·0222308	33	5·7713729	7·0122161	33	5·7609587	7·0022448
34	5·7714080	7·0064655	34	5·7602645	6·9964743	34	5·7498503	6·9865288
35	5·7601885	6·9903914	35	5·7490450	6·9804231	35	5·7386308	6·9705029
36	5·7488497	6·9739929	36	5·7377062	6·9640471	36	5·7272920	6·9541522
37	5·7373825	6·9572542	37	5·7262390	6·9473302	37	5·7158248	6·9374601
38	5·7257771	6·9401576	38	5·7146336	6·9302556	38	5·7042194	6·9204097
39	5·7140227	6·9226848	39	5·7028792	6·9128045	39	5·6924650	6·9029829
40	5·7021079	6·9048170	40	5·6909644	6·8949573	40	5·6805502	6·8851600
41	5·6900202	6·8865331	41	5·6788767	6·8766940	41	5·6684625	6·8669201
42	5·6777464	6·8678110	42	5·6666029	6·8579924	42	5·6561887	6·8482419
43	5·6652724	6·8486277	43	5·6541289	6·8388289	43	5·6437147	6·8291016
44	5·6525835	6·8289581	44	5·6414400	6·8191787	44	5·6310258	6·8094740
45	5·6396638	6·8087751	45	5·6285203	6·7990150	45	5·6181061	6·7893329
46	5·6264968	6·7880504	46	5·6153533	6·7783090	46	5·6049391	6·7686493
47	5·6130651	6·7667530	47	5·6019216	6·7570300	47	5·5915074	6·7473921
48	5·5993505	6·7448496	48	5·5882070	6·7351444	48	5·5777928	6·7255285
49	5·5853339	6·7223043	49	5·5741904	6·7126165	49	5·5637762	6·7030220
50	5·5709955	6·6990775	50	5·5598520	6·6894070	50	5·5494378	6·6798338
51	5·5563145	6·6751272	51	5·5451710	6·6654731	51	5·5347568	6·6559210
52	5·5410248	6·6504063	52	5·5298813	6·6407684	52	5·5194671	6·6312367
53	5·5252903	6·6248835	53	5·5141468	6·6152618	53	5·5037326	6·6057507
54	5·5090937	6·5985111	54	5·4979502	6·5889040	54	5·4875360	6·5794133

JOINT LIVES :—TWO MALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	6		7			8		
Age of (x)	$\lambda\, D_{x,\,6}$	$\lambda\, N_{x,\,6}$	Age of (x)	$\lambda\, D_{x,\,7}$	$\lambda\, N_{x,\,7}$	Age of (x)	$\lambda\, D_{x,\,8}$	$\lambda\, N_{x,\,8}$
55	5·4924078	6·5712339	55	5·4812643	6·5616412	55	5·4708501	6·5521699
56	5·4751949	6·5429915	56	5·4640514	6·5334129	56	5·4536372	6·5239611
57	5·4574069	6·5137194	57	5·4462634	6·5041531	57	5·4358492	6·4947206
58	5·4389854	6·4833454	58	5·4278419	6·4737909	58	5·4174277	6·4643761
59	5·4198618	6·4517913	59	5·4087183	6·4422482	59	5·3983041	6·4328513
60	5·3999570	6·4189753	60	5·3888135	6·4094409	60	5·3783993	6·4000615
61	5·3791817	6·3848054	61	5·3680382	6·3752803	61	5·3576240	6·3659161
62	5·3574362	6·3491868	62	5·3462927	6·3396682	62	5·3358785	6·3303202
63	5·3346105	6·3120161	63	5·3234670	6·3025030	63	5·3130528	6·2931684
64	5·3105843	6·2731831	64	5·2994408	6·2636739	64	5·2890266	6·2543525
65	5·2852269	6·2325707	65	5·2740834	6·2230638	65	5·2636692	6·2137541
66	5·2583973	6·1900548	66	5·2472538	6·1805482	66	5·2368396	6·1712489
67	5·2299142	6·1455035	67	5·2188007	6·1359946	67	5·2083865	6·1267046
68	5·1997061	6·0987756	68	5·1885626	6·0892638	68	5·1781484	6·0799807
69	5·1675108	6·0497237	69	5·1563673	6·0402062	69	5·1459531	6·0309294
70	5·1331762	5·9981913	70	5·1220327	5·9886660	70	5·1116185	5·9793931
71	5·0965096	5·9440136	71	5·0853661	5·9344773	71	5·0749519	5·9252069
72	5·0573080	5·8870143	72	5·0461645	5·8774664	72	5·0357503	5·8681958
73	5·0153583	5·8270124	73	5·0042148	5·8174484	73	4·9938006	5·8081770
74	4·9704367	5·7638119	74	4·9592932	5·7542318	74	4·9488790	5·7449562
75	4·9223094	5·6972117	75	4·9111659	5·6876124	75	4·9007517	5·6783315
76	4·8707320	5·6269987	76	4·8595885	5·6173778	76	4·8491743	5·6080893
77	4·8154501	5·5529496	77	4·8043066	5·5433051	77	4·7938921	5·5340071
78	4·7561987	5·4748304	78	4·7450552	5·4651606	78	4·7346410	5·4558511
79	4·6927026	5·3923979	79	4·6815591	5·3826999	79	4·6711449	5·3733775
80	4·6246762	5·3053961	80	4·6135327	5·2956691	80	4·6031185	5·2863309
81	4·5518236	5·2135592	81	4·5406801	5·2038011	81	4·5302659	5·1944467
82	4·4738385	5·1166107	82	4·4626950	5·1068196	82	4·4522808	5·0974469
83	4·3904046	5·0142622	83	4·3792611	5·0044366	83	4·3688469	4·9950435
84	4·3011948	4·9062138	84	4·2900513	4·8963526	84	4·2796371	4·8869378
85	4·2058720	4·7921542	85	4·1947285	4·7822569	85	4·1843143	4·7728188
86	4·1040886	4·6717595	86	4·0929451	4·6618259	86	4·0825309	4·6523643
87	3·9954868	4·5446974	87	3·9843433	4·5347253	87	3·9739291	4·5252386
88	3·8796984	4·4106205	88	3·8685549	4·4006095	88	3·8581407	4·3910974
89	3·7563150	4·2691703	89	3·7452015	4·2591206	89	3·7347873	4·2495814
90	3·6250375	4·1199767	90	3·6138940	4·1098875	90	3·6034798	4·1003217
91	3·4853770	3·9626553	91	3·4742335	3·9525275	91	3·4638193	3·9429337
92	3·3369539	3·7968101	92	3·3258104	3·7866429	92	3·3153962	3·7770213
93	3·1793484	3·6220264	93	3·1682049	3·6118221	93	3·1577907	3·6021718
94	3·0121303	3·4378773	94	3·0009868	3·4276321	94	2·9905726	3·4179558
95	2·8348592	3·2439098	95	2·8237157	3·2336260	95	2·8133015	3·2239199
96	2·6470843	3·0396346	96	2·6359408	3·0293131	96	2·6255266	3·0195782
97	2·4483444	2·8245170	97	2·4372009	2·8141550	97	2·4267867	2·8043923
98	2·2381681	2·5979276	98	2·2270246	2·5875258	98	2·2166104	2·5777307
99	2·0160737	2·3590648	99	2·0049302	2·3486222	99	1·9945160	2·3387950
100	1·7815689	2·1067874	100	1·7704254	2·0962963	100	1·7600112	2·0864335
101	1·5341514	1·8392197	101	1·5230079	1·8286696	101	1·5125937	1·8187628
102	1·2733084	1·5528203	102	1·2621649	1·5421903	102	1·2517507	1·5322229
103	0·9985168	1·2398873	103	0·9873733	1·2291492	103	0·9769591	1·2190892
104	0·7092432	0·8805850	104	0·6980997	0·8696775	104	0·6876855	0·8594866
105	0·4049438		105	0·3938003		105	0·3833861	
106	0·0850646		106	0·0739211		106	0·0635069	
107	9·7490412		107	9·7378977		107	9·7274835	
108	9·3962989		108	9·3851554		108	9·3747412	
109	9·0262526		109	9·0151091		109	9·0046949	

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	9			10			11	
Age of (x)	$\lambda D_{x,9}$	$\lambda N_{x,9}$	Age of (x)	$\lambda D_{x,10}$	$\lambda N_{x,10}$	Age of (x)	$\lambda D_{x,11}$	$\lambda N_{x,11}$
0	6·2019158	7·4072161	0	6·1926806	7·3962474	0	6·1838161	7·3851776
1	6·1179136	7·3902429	1	6·1086784	7·3792660	1	6·0998139	7·3681818
2	6·0826327	7·3773680	2	6·0733975	7·3664021	2	6·0645330	7·3553266
3	6·0605194	7·3657057	3	6·0512842	7·3547577	3	6·0424197	7·3436992
4	6·0436177	7·3545728	4	6·0343825	7·3436469	4	6·0255180	7·3326095
5	6·0293903	7·3437138	5	6·0201551	7·3328126	5	6·0112906	7·3217997
6	6·0170291	7·3330005	6	6·0077939	7·3221261	6	5·9989294	7·3111397
7	6·0058856	7·3223425	7	5·9966504	7·3114965	7	5·9877859	7·3005385
8	5·9954714	7·3116799	8	5·9862362	7·3008631	8	5·9773717	7·2899351
9	5·9857240	7·3009739	9	5·9764888	7·2901878	9	5·9676243	7·2792906
10	5·9764888	7·2901878	10	5·9672536	7·2794334	10	5·9583891	7·2685682
11	5·9676243	7·2792906	11	5·9583891	7·2685682	11	5·9495246	7·2577357
12	5·9590023	7·2682573	12	5·9497671	7·2575670	12	5·9409026	7·2467678
13	5·9505078	7·2570673	13	5·9412726	7·2464097	13	5·9324081	7·2356441
14	5·9420389	7·2457046	14	5·9328037	7·2350798	14	5·9239392	7·2243483
15	5·9335071	7·2341585	15	5·9242719	7·2235665	15	5·9154074	7·2128689
16	5·9248368	7·2224209	16	5·9156016	7·2118622	16	5·9067371	7·2011988
17	5·9159660	7·2104886	17	5·9067308	7·1999627	17	5·8978663	7·1893333
18	5·9068455	7·1983601	18	5·8976103	7·1878669	18	5·8887458	7·1772718
19	5·8974397	7·1860374	19	5·8882045	7·1755771	19	5·8793400	7·1650160
20	5·8877259	7·1735243	20	5·8784907	7·1630966	20	5·8696262	7·1525699
21	5·8776947	7·1608258	21	5·8684595	7·1504310	21	5·8595950	7·1399385
22	5·8675831	7·1479488	22	5·8583479	7·1375867	22	5·8494834	7·1271282
23	5·8573938	7·1348866	23	5·8481586	7·1245571	23	5·8392941	7·1141324
24	5·8471286	7·1216324	24	5·8378934	7·1113355	24	5·8290289	7·1009447
25	5·8367885	7·1081789	25	5·8275533	7·0979139	25	5·8186888	7·0875571
26	5·8263736	7·0945180	26	5·8171384	7·0842849	26	5·8082739	7·0739620
27	5·8158832	7·0806406	27	5·8066480	7·0704398	27	5·7977835	7·0601499
28	5·8053157	7·0665383	28	5·7960805	7·0563686	28	5·7872160	7·0461122
29	5·7946689	7·0522002	29	5·7854337	7·0420622	29	5·7765692	7·0318381
30	5·7839395	7·0376165	30	5·7747043	7·0275090	30	5·7658398	7·0173180
31	5·7731235	7·0227751	31	5·7638883	7·0126988	31	5·7550238	7·0025401
32	5·7622160	7·0076650	32	5·7529808	6·9976187	32	5·7441163	6·9874920
33	5·7512113	6·9922725	33	5·7419761	6·9822564	33	5·7331116	6·9721614
34	5·7401029	6·9765842	34	5·7308677	6·9665982	34	5·7220032	6·9565346
35	5·7288834	6·9605862	35	5·7196482	6·9506296	35	5·7107837	6·9405973
36	5·7175446	6·9442628	36	5·7083094	6·9343355	36	5·6994449	6·9243339
37	5·7060774	6·9275979	37	5·6968422	6·9176996	37	5·6879777	6·9077286
38	5·6944720	6·9105743	38	5·6852368	6·9007048	38	5·6763723	6·8907640
39	5·6827176	6·8931739	39	5·6734824	6·8833328	39	5·6646179	6·8734222
40	5·6708028	6·8753774	40	5·6615676	6·8655643	40	5·6527031	6·8556835
41	5·6587151	6·8571639	41	5·6494799	6·8473789	41	5·6406154	6·8375273
42	5·6464413	6·8385113	42	5·6372061	6·8287544	42	5·6283416	6·8189323
43	5·6339673	6·8193966	43	5·6247321	6·8096671	43	5·6158676	6·7998745
44	5·6212784	6·7997947	44	5·6120432	6·7900929	44	5·6031787	6·7803288
45	5·6083587	6·7796787	45	5·5991235	6·7700043	45	5·5902590	6·7602692
46	5·5951917	6·7590202	46	5·5859565	6·7493727	46	5·5770920	6·7396665
47	5·5817600	6·7377880	47	5·5725248	6·7281676	47	5·5636603	6·7184898
48	5·5680454	6·7159489	48	5·5588102	6·7063556	48	5·5499457	6·6967063
49	5·5540288	6·6934671	49	5·5447936	6·6839005	49	5·5359291	6·6742797
50	5·5396904	6·6703032	50	5·5304552	6·6607637	50	5·5215907	6·6511710
51	5·5250094	6·6464150	51	5·5157742	6·6369018	51	5·5069097	6·6273378
52	5·5097197	6·6217552	52	5·5004845	6·6122689	52	5·4916200	6·6027330
53	5·4939852	6·5962930	53	5·4847500	6·5868338	53	5·4758855	6·5773264
54	5·4777886	6·5699799	54	5·4685534	6·5605471	54	5·4596889	6·5510686

JOINT LIVES:—Two Males.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	9		10			11		
Age of (x)	λ $D_{x,9}$	λ $N_{x,9}$	Age of (x)	λ $D_{x,10}$	λ $N_{x,10}$	Age of (x)	λ $D_{x,11}$	λ $N_{x,11}$
55	5·4611027	6·5427608	55	5·4518675	6·5333550	55	5·4430030	6·5239047
56	5·4438898	6·5145752	56	5·4346546	6·5051968	56	5·4257901	6·4957754
57	5·4261018	6·4853583	57	5·4168666	6·4760060	57	5·4080021	6·4666143
58	5·4076803	6·4550377	58	5·3984451	6·4457122	58	5·3895806	6·4363487
59	5·3885567	6·4235352	59	5·3793215	6·4142371	59	5·3704570	6·4049026
60	5·3686519	6·3907681	60	5·3594167	6·3814959	60	5·3505522	6·3721913
61	5·3478766	6·3566455	61	5·3386414	6·3474000	61	5·3297769	6·3381239
62	5·3261311	6·3210702	62	5·3168959	6·3118515	62	5·3080314	6·3026047
63	5·3033054	6·2839406	63	5·2940702	6·2747468	63	5·2852057	6·2655298
64	5·2792792	6·2451444	64	5·2700440	6·2359771	64	5·2611795	6·2267883
65	5·2539218	6·2045657	65	5·2446866	6·1954230	65	5·2358221	6·1862640
66	5·2270922	6·1620790	66	5·2178570	6·1529613	66	5·2089925	6·1438301
67	5·1986391	6·1175524	67	5·1894039	6·1084584	67	5·1805394	6·0993560
68	5·1684010	6·0708451	68	5·1591658	6·0617747	68	5·1503013	6·0527001
69	5·1362057	6·0218089	69	5·1269705	6·0127609	69	5·1181060	6·0037139
70	5·1018711	5·9702869	70	5·0926359	5·9612602	70	5·0837714	5·9522401
71	5·0652045	5·9161132	71	5·0559693	5·9071076	71	5·0471048	5·8981134
72	5·0260029	5·8591137	72	5·0167677	5·8501271	72	5·0079032	5·8411592
73	4·9840532	5·7991041	73	4·9748180	5·7901363	73	4·9659535	5·7811930
74	4·9391316	5·7358918	74	4·9298964	5·7269410	74	4·9210319	5·7180215
75	4·8910043	5·6692732	75	4·8817691	5·6603385	75	4·8729046	5·6514418
76	4·8394269	5·5990361	76	4·8301917	5·5901155	76	4·8213272	5·5812408
77	4·7841450	5·5249565	77	4·7749098	5·5160494	77	4·7660453	5·5071952
78	4·7248936	5·4468017	78	4·7156584	5·4379060	78	4·7067939	5·4290716
79	4·6613975	5·3643275	79	4·6521623	5·3554420	79	4·6432978	5·3466256
80	4·5933711	5·2772792	80	4·5841359	5·2684020	80	4·5752714	5·2596028
81	4·5205185	5·1853905	81	4·5112833	5·1765207	81	4·5024188	5·1677370
82	4·4425334	5·0883856	82	4·4332982	5·0795206	82	4·4244337	5·0707518
83	4·3590995	4·9859758	83	4·3498643	4·9771152	83	4·3409998	4·9683582
84	4·2698897	4·8778613	84	4·2606545	4·8690040	84	4·2517900	4·8602589
85	4·1745669	4·7637319	85	4·1653317	4·7548756	85	4·1564672	4·7461413
86	4·0727835	4·6432661	86	4·0635483	4·6344087	86	4·0546838	4·6256838
87	3·9641817	4·5161291	87	3·9549465	4·5072704	87	3·9460820	4·4985524
88	3·8483933	4·3819736	88	3·8391581	4·3731132	88	3·8302936	4·3644013
89	3·7250399	4·2404439	89	3·7158047	4·2315786	89	3·7069402	4·2228730
90	3·5937324	4·0911681	90	3·5844972	4·0822988	90	3·5756327	4·0735959
91	3·4540719	3·9337646	91	3·4448367	3·9248884	91	3·4359722	3·9161896
92	3·3056488	3·7678353	92	3·2964136	3·7589535	92	3·2875491	3·7502553
93	3·1480433	3·5929691	93	3·1388081	3·5840800	93	3·1299436	3·5753842
94	2·9808252	3·4087358	94	2·9715900	3·3998386	94	2·9627255	3·3911428
95	2·8035541	3·2146820	95	2·7943189	3·2057767	95	2·7854544	3·1970809
96	2·6157792	3·0103225	96	2·6065440	3·0014078	96	2·5976795	2·9927116
97	2·4170393	2·7951178	97	2·4078041	2·7861941	97	2·3989396	2·7774964
98	2·2068630	2·5684387	98	2·1976278	2·5595045	98	2·1887633	2·5508054
99	1·9847686	2·3294800	99	1·9755334	2·3205359	99	1·9666689	2·3118344
100	1·7502638	2·0770945	100	1·7410286	2·0681369	100	1·7321641	2·0594328
101	1·5028463	1·8093927	101	1·4936111	1·8004181	101	1·4847466	1·7917075
102	1·2420033	1·5228119	102	1·2327681	1·5138101	102	1·2239036	1·5050889
103	0·9672117	1·2096142	103	0·9579765	1·2005714	103	0·9491120	1·1918282
104	0·6779381	0·8498983	104	0·6687029	0·8407896	104	0·6598384	0·8320041
105	0·3736387		105	0·3644035		105	0·3555390	
106	0·0537595		106	0·0445243		106	0·0356598	
107	9·7177361		107	9·7085009		107	9·6996364	
108	9·3649938		108	9·3557586		108	9·3468941	
109	8·9949475		109	8·9857123		109	8·9768478	

JOINT LIVES:—TWO MALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	12			13			14	
Age of (x)	λ $D_{x,\,12}$	λ $N_{x,\,12}$	Age of (x)	λ $D_{x,\,13}$	λ $N_{x,\,13}$	Age of (x)	λ $D_{x,\,14}$	λ $N_{x,\,14}$
0	6·1751941	7·3739802	0	6·1666996	7·3626324	0	6·1582307	7·3511177
1	6·0911919	7·3569644	1	6·0826974	7·3455935	1	6·0742285	7·3340524
2	6·0559110	7·3441163	2	6·0474165	7·3327506	2	6·0389476	7·3212143
3	6·0337977	7·3325047	3	6·0253032	7·3211545	3	6·0168343	7·3096323
4	6·0168960	7·3214358	4	6·0084015	7·3101058	4	5·9999326	7·2986037
5	6·0026686	7·3106498	5	5·9941741	7·2993433	5	5·9857052	7·2878649
6	5·9903074	7·3000164	6	5·9818129	7·2887362	6	5·9733440	7·2772838
7	5·9791639	7·2894438	7	5·9706694	7·2781922	7	5·9622005	7·2667678
8	5·9687497	7·2788704	8	5·9602552	7·2676437	8	5·9517863	7·2562546
9	5·9590023	7·2682573	9	5·9505078	7·2570673	9	5·9420389	7·2457046
10	5·9497671	7·2575670	10	5·9412726	7·2464097	10	5·9328037	7·2350798
11	5·9409026	7·2467678	11	5·9324081	7·2356441	11	5·9239392	7·2243483
12	5·9322806	7·2358341	12	5·9237861	7·2247446	12	5·9153172	7·2134835
13	5·9237861	7·2247446	13	5·9152916	7·2136901	13	5·9068227	7·2024643
14	5·9153172	7·2134835	14	5·9068227	7·2024643	14	5·8983538	7·1912746
15	5·9067854	7·2020392	15	5·8982909	7·1910557	15	5·8898220	7·1799026
16	5·8981151	7·1904039	16	5·8896206	7·1794567	16	5·8811517	7·1683401
17	5·8892443	7·1785738	17	5·8807498	7·1676626	17	5·8722809	7·1565830
18	5·8801238	7·1665476	18	5·8716293	7·1556727	18	5·8631604	7·1446303
19	5·8707180	7·1543272	19	5·8622235	7·1434888	19	5·8537546	7·1324835
20	5·8610042	7·1419164	20	5·8525097	7·1311142	20	5·8440408	7·1201470
21	5·8509730	7·1293206	21	5·8424785	7·1185547	21	5·8340096	7·1076251
22	5·8408614	7·1165456	22	5·8323669	7·1058166	22	5·8238980	7·0949244
23	5·8306721	7·1035851	23	5·8221776	7·0928932	23	5·8137087	7·0820389
24	5·8204069	7·0904330	24	5·8119124	7·0797773	24	5·8034435	7·0689614
25	5·8100668	7·0770807	25	5·8015723	7·0664616	25	5·7931034	7·0556834
26	5·7996519	7·0635203	26	5·7911574	7·0529377	26	5·7826885	7·0421974
27	5·7891615	7·0497435	27	5·7806670	7·0391972	27	5·7721981	7·0284940
28	5·7785940	7·0357398	28	5·7700995	7·0252301	28	5·7616306	7·0145642
29	5·7679472	7·0215006	29	5·7594527	7·0110263	29	5·7509838	7·0003980
30	5·7572178	7·0070147	30	5·7487233	6·9965759	30	5·7402544	6·9859841
31	5·7464018	6·9922704	31	5·7379073	6·9818667	31	5·7294384	6·9713118
32	5·7354943	6·9772558	32	5·7269998	6·9668871	32	5·7185309	6·9563684
33	5·7244896	6·9619583	33	5·7159951	6·9516242	33	5·7075262	6·9411413
34	5·7133812	6·9463644	34	5·7048867	6·9360644	34	5·6964178	6·9256170
35	5·7021617	6·9304595	35	5·6936672	6·9201934	35	5·6851983	6·9097810
36	5·6908229	6·9142286	36	5·6823284	6·9039957	36	5·6738595	6·8936181
37	5·6793557	6·8976551	37	5·6708612	6·8874555	37	5·6623923	6·8771120
38	5·6677563	6·8807223	38	5·6592558	6·8705554	38	5·6507869	6·8602458
39	5·6559959	6·8634116	39	5·6475014	6·8532772	39	5·6390325	6·8430010
40	5·6440811	6·8457040	40	5·6355866	6·8356017	40	5·6271177	6·8253587
41	5·6319934	6·8275786	41	5·6234989	6·8175084	41	5·6150300	6·8072979
42	5·6197196	6·8090138	42	5·6112251	6·7989749	42	5·6027562	6·7887971
43	5·6072456	6·7899864	43	5·5987511	6·7799785	43	5·5902822	6·7698325
44	5·5945567	6·7704712	44	5·5860622	6·7604943	44	5·5775933	6·7503797
45	5·5816370	6·7504411	45	5·5731425	6·7404952	45	5·5646736	6·7304123
46	5·5684700	6·7298683	46	5·5599755	6·7199527	46	5·5515066	6·7099011
47	5·5550383	6·7087216	47	5·5465438	6·6988363	47	5·5380749	6·6888153
48	5·5413237	6·6869673	48	5·5328292	6·6771126	48	5·5243603	6·6671222
49	5·5273071	6·6645703	49	5·5188126	6·6547453	49	5·5103437	6·6447856
50	5·5129687	6·6414909	50	5·5044742	6·6316961	50	5·4960053	6·6217663
51	5·4982877	6·6176869	51	5·4897932	6·6079221	51	5·4813243	6·5980225
52	5·4829980	6·5931118	52	5·4745035	6·5833764	52	5·4660346	6·5735069
53	5·4672635	6·5677343	53	5·4587690	6·5580290	53	5·4503001	6·5481891
54	5·4510669	6·5415060	54	5·4425724	6·5318305	54	5·4341035	6·5220206

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	12			13			14	
Age of (x)	λ $D_{x,\,12}$	λ $N_{x,\,12}$	Age of (x)	λ $D_{x,\,13}$	λ $N_{x,\,13}$	Age of (x)	λ $D_{x,\,14}$	λ $N_{x,\,14}$
55	5·4343810	6·5143722	55	5·4258865	6·5047265	55	5·4174176	6·4949465
56	5·4171681	6·4862722	56	5·4086736	6·4766573	56	5·4002047	6·4669069
57	5·3993801	6·4571412	57	5·3908856	6·4475558	57	5·3824167	6·4378362
58	5·3809586	6·4269066	58	5·3724641	6·4173519	58	5·3639952	6·4076618
59	5·3618350	6·3954899	59	5·3533405	6·3859668	59	5·3448716	6·3763072
60	5·3419302	6·3628090	60	5·3334357	6·3533157	60	5·3249668	6·3436876
61	5·3211549	6·3287729	61	5·3126604	6·3193105	61	5·3041915	6·3097121
62	5·2994094	6·2932840	62	5·2909149	6·2838537	62	5·2824460	6·2742858
63	5·2765837	6·2562401	63	5·2680892	6·2468406	63	5·2596203	6·2373044
64	5·2525575	6·2175300	64	5·2440630	6·2081622	64	5·2355941	6·1986569
65	5·2272001	6·1770358	65	5·2187056	6·1677004	65	5·2102367	6·1582261
66	5·2003705	6·1346341	66	5·1918760	6·1253294	66	5·1834071	6·1158874
67	5·1719174	6·0901900	67	5·1634229	6·0809182	67	5·1549540	6·0715068
68	5·1416793	6·0435650	68	5·1331848	6·0343244	68	5·1247159	6·0249456
69	5·1094840	5·9946093	69	5·1009895	5·9854009	69	5·0925206	5·9760532
70	5·0751494	5·9431659	70	5·0666549	5·9339891	70	5·0581860	5·9246736
71	5·0384828	5·8890691	71	5·0299883	5·8799241	71	5·0215194	5·8706403
72	4·9992812	5·8321441	72	4·9907867	5·8230305	72	4·9823178	5·8137784
73	4·9573315	5·7722069	73	4·9488370	5·7631242	73	4·9403681	5·7539038
74	4·9124099	5·7090640	74	4·9039154	5·7000121	74	4·8954165	5·6908229
75	4·8642826	5·6425117	75	4·8557881	5·6334906	75	4·8473192	5·6243325
76	4·8127052	5·5723377	76	4·8042107	5·5633460	76	4·7957418	5·5542195
77	4·7574233	5·4983183	77	4·7489288	5·4893561	77	4·7404599	5·4802595
78	4·6981719	5·4202198	78	4·6896774	5·4112863	78	4·6812085	5·4022203
79	4·6346758	5·3377982	79	4·6261813	5·3288924	79	4·6177124	5·3198563
80	4·5666494	5·2507982	80	4·5581549	5·2419202	80	4·5496860	5·2329128
81	4·4937968	5·1589547	81	4·4853023	5·1501025	81	4·4768334	5·1411241
82	4·4158117	5·0619900	82	4·4073172	5·0531638	82	4·3988483	5·0442128
83	4·3323778	4·9596171	83	4·3238833	4·9508150	83	4·3154144	4·9418914
84	4·2431680	4·8515353	84	4·2346735	4·8427571	84	4·2262046	4·8338602
85	4·1478452	4·7374365	85	4·1393507	4·7286792	85	4·1308818	4·7198076
86	4·0460618	4·6169941	86	4·0375673	4·6082596	86	4·0290984	4·5994125
87	3·9374600	4·4898778	87	3·9289655	4·4811631	87	3·9204966	4·4723402
88	3·8216716	4·3557401	88	3·8131771	4·3470451	88	3·8047082	4·3382447
89	3·6983182	4·2142242	89	3·6898237	4·2055470	89	3·6813548	4·1967690
90	3·5670107	4·0649598	90	3·5585162	4·0562995	90	3·5500473	4·0475419
91	3·4273502	3·9075623	91	3·4188557	3·8989193	91	3·4103868	3·8901817
92	3·2789271	3·7416384	92	3·2704326	3·7330086	92	3·2619637	3·7242915
93	3·1213216	3·5667733	93	3·1128271	3·5581588	93	3·1043582	3·5494581
94	2·9541035	3·3825407	94	2·9456090	3·3739383	94	2·9371401	3·3652555
95	2·7768324	3·1884855	95	2·7683379	3·1798951	95	2·7598690	3·1712287
96	2·5890575	2·9841226	96	2·5805630	2·9755439	96	2·5720941	2·9668932
97	2·3903176	2·7689133	97	2·3818231	2·7603463	97	2·3733542	2·7517109
98	2·1801413	2·5422277	98	2·1716468	2·5336729	98	2·1631779	2·5250539
99	1·9580469	2·3032626	99	1·9495524	2·2947190	99	1·9410835	2·2861168
100	1·7235421	2·0508656	100	1·7150476	2·0423349	100	1·7065787	2·0337509
101	1·4761246	1·7831458	101	1·4676301	1·7746279	101	1·4591612	1·7660647
102	1·2152816	1·4965284	102	1·2067871	1·4880259	102	1·1983182	1·4794846
103	0·9404900	1·1832641	103	0·9319955	1·1747719	103	0·9235266	1·1662584
104	0·6512164	0·8234221	104	0·6427219	0·8149331	104	0·6342530	0·8064445
105	0·3469170		105	0·3384225		105	0·3299536	
106	0·0270378		106	0·0185433		106	0·0100744	
107	9·6910144		107	9·6825199		107	9·6740510	
108	9·3382721		108	9·3297776		108	9·3213087	
109	8·9682258		109	8·9597313		109	8·9512624	

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	15		16			17		
Age of (x)	λ $D_{x,15}$	λ $N_{x,15}$	Age of (x)	λ $D_{x,16}$	λ $N_{x,16}$	Age of (x)	λ $D_{x,17}$	λ $N_{x,17}$
0	6·1496989	7·3394229	0	6·1410286	7·3275387	0	6·1321578	7·3154610
1	6·0656967	7·3223297	1	6·0570264	7·3104171	1	6·0481556	7·2983102
2	6·0304158	7·3094952	2	6·0217455	7·2975858	2	6·0128747	7·2854826
3	6·0083025	7·2979274	3	5·9996322	7·2860321	3	5·9907614	7·2739426
4	5·9914008	7·2869184	4	5·9827305	7·2750424	4	5·9738597	7·2629719
5	5·9771734	7·2762028	5	5·9685031	7·2643498	5	5·9596323	7·2523021
6	5·9648122	7·2656478	6	5·9561419	7·2538207	6	5·9472711	7·2417989
7	5·9536687	7·2551601	7	5·9449984	7·2433610	7	5·9361276	7·2313674
8	5·9432545	7·2446769	8	5·9345842	7·2329080	8	5·9257134	7·2209440
9	5·9335071	7·2341585	9	5·9248368	7·2224209	9	5·9159660	7·2104886
10	5·9242719	7·2235665	10	5·9156016	7·2118622	10	5·9067308	7·1999627
11	5·9154074	7·2128689	11	5·9067371	7·2011988	11	5·8978663	7·1893333
12	5·9067854	7·2020392	12	5·8981151	7·1904039	12	5·8892443	7·1785738
13	5·8982909	7·1910557	13	5·8896206	7·1794567	13	5·8807498	7·1676626
14	5·8898220	7·1799026	14	5·8811517	7·1683401	14	5·8722809	7·1565830
15	5·8812902	7·1685674	15	5·8726199	7·1570422	15	5·8637491	7·1453226
16	5·8726199	7·1570422	16	5·8639496	7·1455550	16	5·8550788	7·1338738
17	5·8637491	7·1453226	17	5·8550788	7·1338738	17	5·8462080	7·1222316
18	5·8546286	7·1334083	18	5·8459583	7·1219978	18	5·8370875	7·1103951
19	5·8452228	7·1212998	19	5·8365525	7·1099284	19	5·8276817	7·0983654
20	5·8355090	7·1090011	20	5·8268387	7·0976696	20	5·8179679	7·0861466
21	5·8254778	7·0965183	21	5·8168075	7·0852260	21	5·8079367	7·0737440
22	5·8153662	7·6838565	22	5·8066959	7·0726046	22	5·7978251	7·0611632
23	5·8051769	7·0710100	23	5·7965066	7·0597981	23	5·7876358	7·0483987
24	5·7949117	7·0579713	24	5·7862414	7·0467998	24	5·7773706	7·0354417
25	5·7845716	7·0447330	25	5·7759013	7·0336015	25	5·7670305	7·0222852
26	5·7741567	7·0312856	26	5·7654864	7·0201951	26	5·7566156	7·0089203
27	5·7636663	7·0176218	27	5·7549960	7·0065713	27	5·7461252	6·9953383
28	5·7530988	7·0037306	28	5·7444285	6·9927205	28	5·7355577	6·9815291
29	5·7424520	6·9896027	29	5·7337817	6·9786325	29	5·7249109	6·9674827
30	5·7317226	6·9752274	30	5·7230523	6·9642966	30	5·7141815	6·9531880
31	5·7209066	6·9605926	31	5·7122363	6·9497015	31	5·7033655	6·9386336
32	5·7099991	6·9456870	32	5·7013288	6·9348346	32	5·6924580	6·9238074
33	5·6989944	6·9304971	33	5·6903241	6·9196834	33	5·6814533	6·9086960
34	5·6878860	6·9150095	34	5·6792157	6·9042339	34	5·6703449	6·8932864
35	5·6766665	6·8992099	35	5·6679962	6·8884718	35	5·6591254	6·8775633
36	5·6653277	6·8830828	36	5·6566574	6·8723820	36	5·6477866	6·8615119
37	5·6538605	6·8666122	37	5·6451902	6·8559480	37	5·6363194	6·8451160
38	5·6422551	6·8497809	38	5·6335848	6·8391529	38	5·6247140	6·8283582
39	5·6305007	6·8325707	39	5·6218304	6·8219782	39	5·6129596	6·8112206
40	5·6185859	6·8149622	40	5·6099156	6·8044049	40	5·6010448	6·7936834
41	5·6064982	6·7969351	41	5·5978279	6·7864123	41	5·5889571	6·7757266
42	5·5942244	6·7784674	42	5·5855541	6·7679787	42	5·5766833	6·7573279
43	5·5817504	6·7595360	43	5·5730801	6·7490807	43	5·5642093	6·7384643
44	5·5690615	6·7401153	44	5·5603912	6·7296934	44	5·5515204	6·7191110
45	5·5561418	6·7201795	45	5·5474715	6·7097901	45	5·5386007	6·6992413
46	5·5429748	6·6997001	46	5·5343045	6·6893424	46	5·5254337	6·6788262
47	5·5295431	6·6786458	47	5·5208728	6·6683200	47	5·5120020	6·6578357
48	5·5158285	6·6569833	48	5·5071582	6·6466891	48	5·4982874	6·6362366
49	5·5018119	6·6346776	49	5·4931416	6·6244137	49	5·4842708	6·6139928
50	5·4874735	6·6116888	50	5·4788032	6·6014557	50	5·4699324	6·5910649
51	5·4727925	6·5879747	51	5·4641222	6·5777718	51	5·4552514	6·5674116
52	5·4575028	6·5634892	52	5·4488325	6·5533156	52	5·4399617	6·5429852
53	5·4417683	6·5382012	53	5·4330980	6·5280573	53	5·4242272	6·5177557
54	5·4255717	6·5120619	54	5·4169014	6·5019474	54	5·4080306	6·4916751

JOINT LIVES :—TWO MALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	15		16			17		
Age of (x)	λ $D_{x,\,15}$	λ $N_{x,\,15}$	Age of (x)	λ $D_{x,\,16}$	λ $N_{x,\,16}$	Age of (x)	λ $D_{x,\,17}$	λ $N_{x,\,17}$
55	5·4088858	6·4850175	55	5·4002155	6·4749319	55	5·3913447	6·4646880
56	5·3910729	6·4570074	56	5·3830026	6·4469506	56	5·3741318	6·4367352
57	5·3738849	6·4279659	57	5·3652146	6·4179380	57	5·3563438	6·4077503
58	5·3554634	6·3978215	58	5·3467931	6·3878220	58	5·3379223	6·3776622
59	5·3363398	6·3664958	59	5·3276695	6·3565253	59	5·3187987	6·3463929
60	5·3164350	6·3339061	60	5·3077647	6·3239633	60	5·2988939	6·3138588
61	5·2956597	6·2999612	61	5·2869894	6·2900471	61	5·2781186	6·2799689
62	5·2739142	6·2645637	62	5·2652439	6·2546791	62	5·2563731	6·2446281
63	5·2510885	6·2276121	63	5·2424182	6·2177548	63	5·2335474	6·2077316
64	5·2270623	6·1889951	64	5·2183920	6·1791662	64	5·2095212	6·1691685
65	5·2017049	6·1485943	65	5·1930346	6·1387942	65	5·1841638	6·1288233
66	5·1748753	6·1062858	66	5·1662050	6·0965138	66	5·1573342	6·0865695
67	5·1464222	6·0619363	67	5·1377519	6·0521929	67	5·1288811	6·0422746
68	5·1161841	6·0154046	68	5·1075138	6·0056905	68	5·0986430	5·9957984
69	5·0839888	5·9665434	69	5·0753185	5·9568573	69	5·0664477	5·9469918
70	5·0496542	5·9151940	70	5·0409839	5·9055368	70	5·0321131	5·8956976
71	5·0129876	5·8611914	71	5·0043173	5·8515623	71	4·9954465	5·8417492
72	4·9737860	5·8043603	72	4·9651157	5·7947600	72	4·9562449	5·7849726
73	4·9318363	5·7445165	73	4·9231660	5·7349449	73	4·9142952	5·7251834
74	4·8869147	5·6814662	74	4·8782444	5·6719233	74	4·8693736	5·6621877
75	4·8387874	5·6150062	75	4·8301171	5·6054919	75	4·8212463	5·5957820
76	4·7872100	5·5449234	76	4·7785397	5·5354375	76	4·7696689	5·5257533
77	4·7319281	5·4709944	77	4·7232578	5·4615365	77	4·7143870	5·4518778
78	4·6726767	5·3929842	78	4·6640064	5·3835556	78	4·6551356	5·3739219
79	4·6091806	5·3106502	79	4·6005103	5·3012486	79	4·5916395	5·2916416
80	4·5411542	5·2237363	80	4·5324839	5·2143629	80	4·5236131	5·2047795
81	4·4683016	5·1319761	81	4·4596313	5·1226307	81	4·4507605	5·1130730
82	4·3903165	5·0350938	82	4·3816462	5·0257752	82	4·3727754	5·0162425
83	4·3068826	4·9327998	83	4·2982123	4·9235087	83	4·2893415	4·9140003
84	4·2176728	4·8247960	84	4·2090025	4·8155313	84	4·2001317	4·8060469
85	4·1223500	4·7107704	85	4·1136797	4·7015317	85	4·1048089	4·6920719
86	4·0205666	4·5904015	86	4·0118963	4·5811882	86	4·0030255	4·5717519
87	3·9119648	4·4633542	87	3·9032945	4·4541669	87	3·8944237	4·4447536
88	3·7961764	4·3292840	88	3·7875061	4·3201206	88	3·7786353	4·3107309
89	3·6728230	4·1878314	89	3·6641527	4·1786930	89	3·6552819	4·1693252
90	3·5415155	4·0386281	90	3·5328452	4·0295124	90	3·5239744	4·0201678
91	3·4018550	3·8812899	91	3·3931847	3·8721977	91	3·3843139	3·8628740
92	3·2534319	3·7154208	92	3·2447616	3·7063507	92	3·2358908	3·6970488
93	3·0958264	3·5406097	93	3·0871561	3·5315607	93	3·0782853	3·5222799
94	2·9286083	3·3564259	94	2·9199380	3·3473982	94	2·9110672	3·3381372
95	2·7513372	3·1624183	95	2·7426669	3·1534115	95	2·7337961	3·1441706
96	2·5635623	2·9581016	96	2·5548920	2·9491147	96	2·5460212	2·9398940
97	2·3648224	2·7429379	97	2·3561521	2·7339704	97	2·3472813	2·7247697
98	2·1546461	2·5162986	98	2·1459758	2·5073512	98	2·1371050	2·4981699
99	1·9325517	2·2773825	99	1·9238814	2·2684565	99	1·9150106	2·2592959
100	1·6980469	2·0250391	100	1·6893766	2·0161375	100	1·6805058	2·0070006
101	1·4506294	1·7573786	101	1·4419591	1·7485067	101	1·4330883	1·7393991
102	1·1897864	1·4708293	102	1·1811161	1·4619935	102	1·1722453	1·4529252
103	0·9149948	1·1576381	103	0·9063245	1·1488462	103	0·8974537	1·1398287
104	0·6257212	0·7978697	104	0·6170509	0·7891363	104	0·6081801	0·7801804
105	0·3214218		105	0·3127515		105	0·3038807	
106	0·0015426		106	9·9928723		106	9·9840015	
107	9·6655192		107	9·6568489		107	9·6479781	
108	9·3127769		108	9·3041066		108	9·2952358	
109	8·9427306		109	8·9340603		109	8·9251895	

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	18			19			20	
Age of (x)	λ $D_{x,\,18}$	λ $N_{x,\,18}$	Age of (x)	λ $D_{x,\,19}$	λ $N_{x,\,19}$	Age of (x)	λ $D_{x,\,20}$	λ $N_{x,\,20}$
0	6·1230373	7·3031875	0	6·1136315	7·2907198	0	6·1039177	7·2780616
1	6·0390351	7·2860082	1	6·0296293	7·2735126	1	6·0199155	7·2608277
2	6·0037542	7·2731838	2	5·9943184	7·2606916	2	5·9846346	7·2480098
3	5·9816409	7·2616575	3	5·9722351	7·2491788	3	5·9625213	7·2365106
4	5·9647392	7·2507061	4	5·9553334	7·2382464	4	5·9456196	7·2255969
5	5·9505118	7·2400591	5	5·9411060	7·2276222	5	5·9313922	7·2149953
6	5·9381506	7·2295816	6	5·9287448	7·2171698	6	5·9190310	7·2045682
7	5·9270071	7·2191775	7	5·9176013	7·2067938	7	5·9078875	7·1942198
8	5·9165929	7·2087841	8	5·9071871	7·1964299	8	5·8974733	7·1838854
9	5·9068155	7·1983601	9	5·8974397	7·1860374	9	5·8877259	7·1735243
10	5·8976103	7·1878669	10	5·8882045	7·1755771	10	5·8784907	7·1630966
11	5·8887458	7·1772718	11	5·8793400	7·1650160	11	5·8696262	7·1525699
12	5·8801238	7·1665476	12	5·8707180	7·1543272	12	5·8610042	7·1419164
13	5·8716293	7·1556727	13	5·8622235	7·1434888	13	5·8525097	7·1311142
14	5·8631604	7·1446303	14	5·8537546	7·1324835	14	5·8440408	7·1201470
15	5·8546286	7·1334083	15	5·8452228	7·1212998	15	5·8355090	7·1090011
16	5·8459583	7·1219978	16	5·8365525	7·1099284	16	5·8268387	7·0976696
17	5·8370875	7·1103951	17	5·8276817	7·0983654	17	5·8179679	7·0861466
18	5·8279670	7·0985984	18	5·8185612	7·0866093	18	5·8088174	7·0744316
19	5·8185612	7·0866093	19	5·8091554	7·0746618	19	5·7994416	7·0625256
20	5·8088174	7·0744316	20	5·7994416	7·0625256	20	5·7897278	7·0504327
21	5·7988162	7·0620703	21	5·7894104	7·0502069	21	5·7796966	7·0381574
22	5·7887046	7·0495320	22	5·7792988	7·0377117	22	5·7695850	7·0257060
23	5·7785153	7·0368097	23	5·7691095	7·0250329	23	5·7593957	7·0130725
24	5·7682501	7·0238958	24	5·7588443	7·0121629	24	5·7491305	7·0002479
25	5·7579100	7·0107823	25	5·7485042	6·9990941	25	5·7387904	6·9872243
26	5·7474951	6·9974606	26	5·7380893	6·9858170	26	5·7283755	6·9739935
27	5·7370047	6·9839217	27	5·7275989	6·9723227	27	5·7178851	6·9605455
28	5·7264372	6·9701557	28	5·7170314	6·9586011	28	5·7073176	6·9468706
29	5·7157904	6·9561521	29	5·7063846	6 9446429	29	5·6966708	6·9329584
30	5·7050610	6·9419003	30	5·6956552	6·9304353	30	5·6859414	6·9187973
31	5·6942150	6·9273884	31	5·6848392	6·9159677	31	5·6751254	6·9043756
32	5·6833375	6·9126041	32	5·6739317	6·9012272	32	5·6642179	6·8896812
33	5·6723328	6·8975347	33	5·6629270	6·8862012	33	5·6532132	6·8747005
34	5·6612244	6·8821659	34	5·6518186	6·8708757	34	5·6421048	6·8594198
35	5·6500049	6·8664839	35	5·6405991	6·8552357	35	5·6308853	6·8438247
36	5·6386661	6·8504725	36	5·6292603	6·8392666	36	5·6195465	6·8278992
37	5·6271989	6·8341160	37	5·6177931	6·8229514	37	5·6080793	6·8116275
38	5·6155935	6·8173973	38	5·6061877	6·8062732	38	5·5964739	6·7949919
39	5·6038391	6·8002978	39	5·5944333	6·7892136	39	5·5847195	6·7779741
40	5·5919243	6·7827984	40	5·5825185	6·7717535	40	5·5728047	6·7605551
41	5·5798366	6·7648784	41	5·5704308	6·7538720	41	5·5607170	6·7427140
42	5·5675628	6·7465161	42	5·5581570	6·7355475	42	5·5484432	6·7244290
43	5·5550888	6·7276880	43	5·5456830	6·7167567	43	5·5359692	6·7056769
44	5·5423999	6·7083697	44	5·5329941	6·6974744	44	5·5232803	6·6864328
45	5·5294802	6·6885341	45	5·5200744	6·6776743	45	5·5103606	6·6666698
46	5·5163132	6·6681532	46	5·5069074	6·6573279	46	5·4971936	6·6463597
47	5·5028815	6·6471953	47	5·4934757	6·6364047	47	5·4837619	6·6254716
48	5·4891669	6·6256283	48	5·4797611	6·6148708	48	5·4700473	6·6039730
49	5·4751503	6·6034163	49	5·4657445	6·5926910	49	5·4560307	6·5818268
50	5·4608119	6·5805200	50	5·4514061	6·5698267	50	5·4416923	6·5589952
51	5·4461309	6·5568966	51	5·4367251	6·5462348	51	5·4270113	6·5354357
52	5·4308412	6·5325005	52	5·4214354	6·5218686	52	5·4117216	6·5111012
53	5·4151067	6·5073005	53	5·4057009	6·4966989	53	5·3959871	6·4859613
54	5·3989101	6·4812484	54	5·3895013	6·4706757	54	5·3797905	6·4599687

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	18		19			20		
Age of (x)	λ $D_{x,\,18}$	λ $N_{x,\,18}$	Age of (x)	λ $D_{x,\,19}$	λ $N_{x,\,19}$	Age of (x)	λ $D_{x,\,20}$	λ $N_{x,\,20}$
55	5·3822242	6·4542900	55	5·3728184	6·4437457	55	5·3631046	6·4330676
56	5·3650113	6·4263648	56	5·3556055	6·4158487	56	5·3458917	6·4051989
57	5·3472233	6·3974075	57	5·3378175	6·3869188	57	5·3281037	6·3762970
58	5·3288018	6·3673464	58	5·3193960	6·3568844	58	5·3096822	6·3462894
59	5·3096782	6·3361039	59	5·3002724	6·3256679	59	5·2905586	6·3150994
60	5·2897734	6·3035960	60	5·2803676	6·2931857	60	5·2706538	6·2826427
61	5·2689981	6·2697326	61	5·2595923	6·2593475	61	5·2498785	6·2488295
62	5·2472526	6·2344165	62	5·2378468	6·2240566	62	5·2281330	6·2135629
63	5·2244269	6·1975458	63	5·2150211	6·1872090	63	5·2053073	6·1767394
64	5·2004007	6·1590086	64	5·1909949	6·1486961	64	5·1812811	6·1382483
65	5·1750433	6·1186869	65	5·1656375	6·1083986	65	5·1559237	6·0979740
66	5·1482137	6·0764581	66	5·1388079	6·0661914	66	5·1290941	6·0557891
67	5·1197606	6·0321875	67	5·1103548	6·0219436	67	5·1006410	6·0115615
68	5·0895225	5·9857350	68	5·0801167	5·9755131	68	5·0704029	5·9651523
69	5·0573272	5·9369518	69	5·0479214	5·9267514	69	5·0382076	5·9164108
70	5·0229926	5·8856812	70	5·0135868	5·8755017	70	5·0038730	5·8651804
71	4·9863260	5·8317563	71	4·9769202	5·8215979	71	4·9672064	5·8112955
72	4·9471244	5·7750028	72	4·9377186	5·7648649	72	4·9280048	5·7545809
73	4·9051747	5·7152364	73	4·8957689	5·7051185	73	4·8860551	5·6948527
74	4·8602531	5·6522635	74	4·8508473	5·6421652	74	4·8411335	5·6319168
75	4·8121258	5·5858805	75	4·8027200	5·5758018	75	4·7930062	5·5655701
76	4·7605484	5·5158741	76	4·7511426	5·5058146	76	4·7414288	5·4955995
77	4·7052665	5·4420210	77	4·6958607	5·4319802	77	4·6861469	5·4217812
78	4·6460151	5·3640868	78	4·6366093	5·3540648	78	4·6268955	5·3438814
79	4·5825190	5·2818278	79	4·5731132	5·2718237	79	4·5633994	5·2616559
80	4·5144926	5·1949892	80	4·5050868	5·1850025	80	4·4953730	5·1748489
81	4·4416400	5·1033025	81	4·4322342	5·0933352	81	4·4225204	5·0831955
82	4·3636549	5·0064938	82	4·3542491	4·9965423	82	4·3445353	4·9864184
83	4·2802210	4·9042729	83	4·2708152	4·8943393	83	4·2611014	4·8842271
84	4·1910112	4·7963405	84	4·1816054	4·7864242	84	4·1718916	4·7763256
85	4·0956884	4·6823861	85	4·0862826	4·6724858	85	4·0765688	4·6624008
86	3·9939050	4·5620865	86	3·9844992	4·5522031	86	3·9747854	4·5421305
87	3·8853032	4·4351082	87	3·8758974	4·4252412	87	3·8661836	4·4151807
88	3·7695148	4·3011053	88	3·7601090	4·2912541	88	3·7503952	4·2812057
89	3·6461614	4·1597199	89	3·6367556	4·1498842	89	3·6270418	4·1398473
90	3·5148539	4·0105811	90	3·5054481	4·0007616	90	3·4957343	3·9907357
91	3·3751934	3·8533076	91	3·3657876	3·8435019	91	3·3560738	3·8334882
92	3·2267703	3·6875004	92	3·2173645	3·6777119	92	3·2076507	3·6677070
93	3·0691648	3·5127498	93	3·0597590	3·5029758	93	3·0500452	3·4929838
94	2·9019167	3·3286258	94	2·8925409	3·3188661	94	2·8828271	3·3088840
95	2·7246756	3·1346768	95	2·7152698	3·1249315	95	2·7055560	3·1149597
96	2·5369007	2·9304177	96	2·5274949	2·9206867	96	2·5177811	2·9107253
97	2·3381608	2 7153121	97	2·3287550	2·7055952	97	2·3190412	2·6956437
98	2·1279845	2·4887312	98	2·1185787	2·4790294	98	2·1088649	2·4690882
99	1·9058901	2·2498751	99	1·8964843	2·2401895	99	1·8867705	2·2302596
100	1·6713853	1·9976004	100	1·6619795	1·9879312	100	1·6522657	1·9780138
101	1·4239678	1·7300244	101	1·4145620	1·7203751	101	1·4048482	1·7104703
102	1·1631248	1·4435868	102	1·1537190	1·4339633	102	1·1440052	1·4240760
103	0·8883332	1·1305428	103	0·8789274	1·1209653	103	0·8692136	1·1111011
104	0·5990596	0·7709698	104	0·5896538	0·7614617	104	0·5799400	0·7516486
105	0·2947602		105	0·2853544		105	0·2756406	
106	9·9748810		106	9·9654752		106	9·9557614	
107	9·6388576		107	9·6294518		107	9·6197380	
108	9·2861153		108	9·2767095		108	9·2669957	
109	8·9160690		109	8·9066632		109	8·8969494	

JOINT LIVES:—Two Males.

Logarithms of the Series $D_{x, y}$ and $N_{x, y}$.

Age of (y)	21		22			23		
Age of (x)	$\lambda D_{x, 21}$	$\lambda N_{x, 21}$	Age of (x)	$\lambda D_{x, 22}$	$\lambda N_{x, 22}$	Age of (x)	$\lambda D_{x, 23}$	$\lambda N_{x, 23}$
0	6·0938865	7·2652201	0	6·0837749	7·2522053	0	6·0735856	7·2390113
1	6·0098843	7·2479590	1	5·9997727	7·2349149	1	5·9895834	7·2216897
2	5·9746034	7·2351445	2	5·9644918	7·2221023	2	5·9543025	7·2088779
3	5·9524901	7·2236582	3	5·9423785	7·2106288	3	5·9321892	7·1974159
4	5·9355884	7·2127633	4	5·9254768	7·1997516	4	5·9152875	7·1865566
5	5·9213610	7·2021836	5	5·9112494	7·1891943	5	5·9010601	7·1760204
6	5·9089998	7·1917820	6	5·8988882	7·1788172	6	5·8886989	7·1656680
7	5·8978563	7·1814609	7	5·8877447	7·1685237	7	5·8775554	7·1554013
8	5·8874421	7·1711558	8	5·8773305	7·1582478	8	5·8671412	7·1451548
9	5·8776947	7·1608258	9	5·8675831	7·1479488	9	5·8573938	7·1348866
10	5·8684595	7·1504310	10	5·8583479	7·1375867	10	5·8481586	7·1245571
11	5·8595950	7·1399385	11	5·8494834	7·1271282	11	5·8392941	7·1141324
12	5·8509730	7·1293206	12	5·8408614	7·1165456	12	5·8306721	7·1035851
13	5·8424785	7·1185547	13	5·8323669	7·1058166	13	5·8221776	7·0928932
14	5·8340096	7·1076251	14	5·8238980	7·0949244	14	5·8137087	7·0820389
15	5·8254778	7·0965183	15	5·8153662	7·0838565	15	5·8051769	7·0710100
16	5·8168075	7·0852260	16	5·8066959	7·0726046	16	5·7965066	7·0597981
17	5·8079367	7·0737440	17	5·7978251	7·0611632	17	5·7876358	7·0483987
18	5·7988162	7·0620703	18	5·7887046	7·0495320	18	5·7785153	7·0368097
19	5·7894104	7·0502069	19	5·7792988	7·0377117	19	5·7691095	7·0250329
20	5·7796966	7·0381574	20	5·7695850	7·0257060	20	5·7593957	7·0130725
21	5·7696654	7·0259266	21	5·7595538	7·0135205	21	5·7493645	7·0009323
22	5·7595538	7·0135205	22	5·7494422	7·0011610	22	5·7392529	6·9886199
23	5·7493645	7·0009323	23	5·7392529	6·9886199	23	5·7290636	6·9761273
24	5·7390993	6·9881547	24	5·7289877	6·9758899	24	5·7187984	6·9634465
25	5·7287592	6·9751785	25	5·7186476	6·9629625	25	5·7084583	6·9505690
26	5·7183443	6·9619951	26	5·7082327	6·9498284	26	5·6980434	6·9374857
27	5·7078539	6·9485953	27	5·6977423	6·9364782	27	5·6875530	6·9241867
28	5·6972864	6·9349684	28	5·6871748	6·9229016	28	5·6769855	6·9106620
29	5·6866396	6·9211044	29	5·6765280	6·9090877	29	5·6663387	6·8969004
30	5·6759102	6·9069917	30	5·6657986	6·8950252	30	5·6556093	6·8828903
31	5·6650942	6·8926184	31	5·6549826	6·8807023	31	5·6447933	6·8686197
32	5·6541867	6·8779716	32	5·6440751	6·8661060	32	5·6338858	6·8540760
33	5·6431820	6·8630388	33	5·6330704	6·8512227	33	5·6228811	6·8392454
34	5·6320736	6·8478052	34	5·6219620	6·8360391	34	5·6117727	6·8241136
35	5·6208541	6·8322567	35	5·6107425	6·8205396	35	5·6005532	6·8086662
36	5·6095153	6·8163777	36	5·5994037	6·8047091	36	5·5892144	6·7928867
37	5·5980481	6·8001511	37	5·5879365	6·7885312	37	5·5777472	6·7767594
38	5·5864427	6·7835606	38	5·5763311	6·7719877	38	5·5661418	6·7602664
39	5·5746883	6·7665871	39	5·5645767	6·7550609	39	5·5543874	6·7433889
40	5·5627735	6·7492113	40	5·5526619	6·7377312	40	5·5424726	6·7261078
41	5·5506858	6·7314129	41	5·5405742	6·7199778	41	5·5303849	6·7084022
42	5·5384120	6·7131695	42	5·5283004	6·7017789	42	5·5181111	6·6902502
43	5·5259380	6·6944583	43	5·5158264	6·6831109	43	5·5056371	6·6716284
44	5·5132491	6·6752541	44	5·5031375	6·6639492	44	5·4929482	6·6525118
45	5·5003294	6·6555304	45	5·4902178	6·6442669	45	5·4800285	6·6328737
46	5·4871624	6·6352585	46	5·4770508	6·6240357	46	5·4668615	6·6126855
47	5·4737307	6·6144079	47	5·4636191	6·6032248	47	5·4534298	6·5919170
48	5·4600161	6·5929453	48	5·4499045	6·5818010	48	5·4397152	6·5705343
49	5·4459995	6·5708353	49	5·4358879	6·5597284	49	5·4256986	6·5485021
50	5·4316611	6·5480380	50	5·4215495	6·5369687	50	5·4113602	6·5257810
51	5·4169801	6·5245120	51	5·4068685	6·5134781	51	5·3966792	6·5023294
52	5·4016904	6·5002104	52	5·3915788	6·4892112	52	5·3813895	6·4780991
53	5·3859559	6·4751031	53	5·3758443	6·4641380	53	5·3656550	6·4530619
54	5·3697593	6·4491409	54	5·3596477	6·4382092	54	5·3494584	6·4271684

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	21			22			23	
Age of (x)	$\lambda\ D_{x,\,21}$	$\lambda\ N_{x,\,21}$	Age of (x)	$\lambda\ D_{x,\,22}$	$\lambda\ N_{x,\,22}$	Age of (x)	$\lambda\ D_{x,\,23}$	$\lambda\ N_{x,\,23}$
55	5·3530734	6·4222707	55	5·3429618	6·4113705	55	5·3327725	6·4003643
56	5·3358605	6·3944314	56	5·3257489	6·3835629	56	5·3155596	6·3725893
57	5·3180725	6·3655579	57	5·3079609	6·3547197	57	5·2977716	6·3437788
58	5·2996510	6·3355784	58	5·2895394	6·3247699	58	5·2793501	6·3138601
59	5·2805274	6·3044153	59	5·2704158	6·2936354	59	5·2602265	6·2827559
60	5·2606226	6·2719851	60	5·2505110	6·2612327	60	5·2403217	6·2503830
61	5·2398473	6·2381972	61	5·2297357	6·2274720	61	5·2195464	6·2166504
62	5·2181018	6·2029553	62	5·2079902	6·1922559	62	5·1978009	6·1814623
63	5·1952761	6·1661559	63	5·1851645	6·1554818	63	5·1749752	6·1447146
64	5·1712499	6·1276885	64	5·1611383	6·1170389	64	5·1509490	6·1062973
65	5·1458925	6·0874354	65	5·1357809	6·0768096	65	5·1255916	6·0660932
66	5·1190629	6·0452729	66	5·1089513	6·0346690	66	5·0987620	6·0239768
67	5·0906098	6·0010671	67	5·0804982	5·9904854	67	5·0703089	5·9798155
68	5·0603717	5·9546771	68	5·0502601	5·9441173	68	5·0400708	5·9334701
69	5·0281764	5·9059555	69	5·0180648	5·8954154	69	5·0078755	5·8847903
70	4·9938418	5·8547442	70	4·9837302	5·8442240	70	4·9735409	5·8336190
71	4·9571752	5·8008774	71	4·9470636	5·7903764	71	4·9368743	5·7797910
72	4·9179736	5·7441804	72	4·9078620	5·7336975	72	4·8976727	5·7231314
73	4·8760239	5·6844688	73	4·8659123	5·6740035	73	4·8557230	5·6634556
74	4·8311023	5·6215495	74	4·8209907	5·6111008	74	4·8108014	5·6005703
75	4·7829750	5·5552184	75	4·7728634	5·5447862	75	4·7626741	5·5342724
76	4·7313976	5·4852627	76	4·7212860	5·4748460	76	4·7110967	5·4643485
77	4·6761157	5·4114591	77	4·6660041	5·4010569	77	4·6558148	5·3905748
78	4·6168643	5·3335732	78	4·6067527	5·3231857	78	4·5965634	5·3127180
79	4·5533682	5·2513610	79	4·5432566	5·2409872	79	4·5330673	5·2305338
80	4·4853418	5·1645673	80	4·4752302	5·1542063	80	4·4650409	5·1437665
81	4·4124892	5·0729252	81	4·4023776	5·0625775	81	4·3921883	5·0521505
82	4·3345041	4·9761596	82	4·3243925	4·9658229	82	4·3142032	4·9554087
83	4·2510702	4·8739817	83	4·2409586	4·8636559	83	4·2307693	4·8532528
84	4·1618604	4·7660893	84	4·1517488	4·7557766	84	4·1415595	4·7453840
85	4·0665376	4·6521757	85	4·0564260	4·6418715	85	4·0462367	4·6314915
86	3·9647542	4·5319151	86	3·9546426	4·5216217	86	3·9444533	4·5112508
87	3·8561524	4·4049748	87	3·8460408	4·3946910	87	3·8358515	4·3843299
88	3·7403640	4·2710089	88	3·7302524	4·2607340	88	3·7200631	4·2503825
89	3·6170106	4·1296593	89	3·6068990	4·1193932	89	3·5967097	4·1090501
90	3·4857031	3·9805556	90	3·4755915	3·9702981	90	3·4654022	3·9599634
91	3·3460426	3·8233158	91	3·3359310	3·8130657	91	3·3257417	3·8027395
92	3·1976195	3·6575434	92	3·1875079	3·6473008	92	3·1773186	3·6369811
93	3·0400140	3·4828250	93	3·0299024	3·4725912	93	3·0197131	3·4622797
94	2·8727959	3·2987341	94	2·8626843	3·2885059	94	2·8524950	3·2782015
95	2·6955248	3·1048169	95	2·6854132	3·0945959	95	2·6752239	3·0842974
96	2·5077499	2·9005888	96	2·4976383	2·8903746	96	2·4874490	2·8800838
97	2·3090100	2·6855134	97	2·2988984	2·6753062	97	2·2887091	2·6650216
98	2·0988337	2·4589641	98	2·0887221	2·4487619	98	2·0785328	2·4384854
99	1·8767393	2·2201429	99	1·8666277	2·2099475	99	1·8564384	2·1996759
100	1·6422345	1·9679049	100	1·6321229	1·9577169	100	1·6219336	1·9474523
101	1·3948170	1·7003705	101	1·3847054	1·6901917	101	1·3745161	1·6799355
102	1·1339740	1·4139850	102	1·1238624	1·4038169	102	1·1136731	1·3935717
103	0·8591824	1·1010249	103	0·8490708	1·0908680	103	0·8388815	1·0806373
104	0·5699088	0·7415849	104	0·5597972	0·7314518	104	0·5496079	0·7212334
105	0·2656094		105	0·2554978		105	0·2453085	
106	9·9457302		106	9·9356186		106	9·9254293	
107	9·6097068		107	9·5995952		107	9·5894059	
108	9·2569645		108	9·2468529		108	9·2366636	
109	8·8869182		109	8·8768066		109	8·8666173	

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Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	24		25			26		
Age of (x)	λ $D_{x,24}$	λ $N_{x,24}$	Age of (x)	λ $D_{x,25}$	λ $N_{x,25}$	Age of (x)	λ $D_{x,26}$	λ $N_{x,26}$
0	6·0633204	7·2256318	0	6·0529803	7·2120597	0	6·0425654	7·1982876
1	5·9793182	7·2082761	1	5·9689781	7·1946676	1	5·9585632	7·1808556
2	5·9440373	7·1954640	2	5·9336972	7·1818539	2	5·9232823	7·1680394
3	5·9219240	7·1840131	3	5·9115839	7·1704131	3	5·9011690	7·1566079
4	5·9050223	7·1731708	4	5·8946822	7·1595874	4	5·8842673	7·1457979
5	5·8907949	7·1626558	5	5·8804548	7·1490928	5	5·8700399	7·1353238
6	5·8784337	7·1523278	6	5·8680936	7·1387885	6	5·8576787	7·1250429
7	5·8672902	7·1420878	7	5·8569501	7·1285750	7	5·8465352	7·1148554
8	5·8568760	7·1318698	8	5·8465359	7·1183858	8	5·8361210	7·1046943
9	5·8471286	7·1216324	9	5·8367885	7·1081789	9	5·8263736	7·0945180
10	5·8378934	7·1113355	10	5·8275533	7·0979139	10	5·8171384	7·0842849
11	5·8290289	7·1009447	11	5·8186888	7·0875571	11	5·8082739	7·0739620
12	5·8204069	7·0904330	12	5·8100668	7·0770807	12	5·7996519	7·0635203
13	5·8119124	7·0797773	13	5·8015723	7·0664616	13	5·7911574	7·0529377
14	5·8034435	7·0689614	14	5·7931034	7·0556834	14	5·7826885	7·0421974
15	5·7949117	7·0579713	15	5·7845716	7·0447330	15	5·7741567	7·0312856
16	5·7862414	7·0467998	16	5·7759013	7·0336015	16	5·7654864	7·0201951
17	5·7773706	7·0354417	17	5·7670305	7·0222852	17	5·7566156	7·0089203
18	5·7682501	7·0238958	18	5·7579100	7·0107823	18	5·7474951	6·9974606
19	5·7588443	7·0121629	19	5·7485042	6·9990941	19	5·7380893	6·9858170
20	5·7491305	7·0002479	20	5·7387904	6·9872243	20	5·7283755	6·9739935
21	5·7390993	6·9881547	21	5·7287592	6·9751785	21	5·7183443	6·9619951
22	5·7289877	6·9758899	22	5·7186476	6·9629625	22	5·7082327	6·9498284
23	5·7187984	6·9634465	23	5·7084583	6·9505690	23	5·6980434	6·9374857
24	5·7085332	6·9508161	24	5·6981931	6·9379897	24	5·6877782	6·9249586
25	5·6981931	6·9379897	25	5·6878530	6·9252161	25	5·6774381	6·9122384
26	5·6877782	6·9249586	26	5·6774381	6·9122384	26	5·6670232	6·8993158
27	5·6772878	6·9117127	27	5·6669477	6·8990469	27	5·6565328	6·8861800
28	5·6667203	6·8982415	28	5·6563802	6·8856311	28	5·6459653	6·8728209
29	5·6560735	6·8845339	29	5·6457334	6·8719794	29	5·6353185	6·8592272
30	5·6453441	6·8705785	30	5·6350040	6·8580804	30	5·6245891	6·8453864
31	5·6345281	6·8563626	31	5·6241880	6·8439216	31	5·6137731	6·8312865
32	5·6236206	6·8418736	32	5·6132805	6·8294895	32	5·6028656	6·8169141
33	5·6126159	6·8270978	33	5·6022758	6·8147709	33	5·5918609	6·8022549
34	5·6015075	6·8120209	34	5·5911674	6·7997512	34	5·5807525	6·7872948
35	5·5902880	6·7966274	35	5·5799479	6·7844151	35	5·5695330	6·7720184
36	5·5789492	6·7809023	36	5·5686091	6·7687463	36	5·5581942	6·7564095
37	5·5674820	6·7648282	37	5·5571419	6·7527287	37	5·5467270	6·7404508
38	5·5558766	6·7483880	38	5·5455365	6·7363441	38	5·5351216	6·7241251
39	5·5441222	6·7315631	39	5·5337821	6·7195743	39	5·5233672	6·7074133
40	5·5322074	6·7143332	40	5·5218673	6·7023993	40	5·5114524	6·6902958
41	5·5201197	6·6966784	41	5·5097796	6·6847978	41	5·4993647	6·6727514
42	5·5078459	6·6785762	42	5·4975058	6·6667486	42	5·4870909	6·6547578
43	5·4953719	6·6600033	43	5·4850318	6·6482275	43	5·4746169	6·6362920
44	5·4826830	6·6409346	44	5·4723429	6·6292098	44	5·4619280	6·6173283
45	5·4697633	6·6213435	45	5·4594232	6·6096686	45	5·4490083	6·5978402
46	5·4565963	6·6012014	46	5·4462562	6·5895754	46	5·4358413	6·5777992
47	5·4431646	6·5804775	47	5·4328245	6·5688993	47	5·4224096	6·5571739
48	5·4294500	6·5591390	48	5·4191099	6·5476072	48	5·4086950	6·5359315
49	5·4154334	6·5371494	49	5·4050933	6·5256635	49	5·3946784	6·5140363
50	5·4010950	6·5144702	50	5·3907549	6·5030287	50	5·3803400	6·4914491
51	5·3864140	6·4910587	51	5·3760739	6·4796607	51	5·3656590	6·4681272
52	5·3711243	6·4668689	52	5·3607842	6·4555127	52	5·3503693	6·4440244
53	5·3553898	6·4418697	53	5·3450497	6·4305553	53	5·3346348	6·4191103
54	5·3391932	6·4160134	54	5·3288531	6·4047384	54	5·3184382	6·3933370

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	24		25			26		
Age of (x)	λ $D_{x,\,24}$	λ $N_{x,\,24}$	Age of (x)	λ $D_{x,\,25}$	λ $N_{x,\,25}$	Age of (x)	λ $D_{x,\,26}$	λ $N_{x,\,26}$
55	5·3225073	6·3892459	55	5·3121672	6·3780095	55	5·3017523	6·3666492
56	5·3052944	6·3615067	56	5·2949543	6·3503083	56	5·2845394	6·3389879
57	5·2875064	6·3327299	57	5·2771663	6·3215686	57	5·2667514	6·3102873
58	5·2690849	6·3028448	58	5·2587448	6·2917184	58	5·2483299	6·2804757
59	5·2499613	6·2717731	59	5·2396212	6·2606814	59	5·2292063	6·2494748
60	5·2300565	6·2394311	60	5·2197164	6·2283729	60	5·2093015	6·2172020
61	5·2092812	6·2057290	61	5·1989411	6·1947030	61	5·1885262	6·1835668
62	5·1875357	6·1705701	62	5·1771956	6·1595750	62	5·1667807	6·1484722
63	5·1647100	6·1338507	63	5·1543699	6·1228860	63	5·1439550	6·1118147
64	5·1406838	6·0954609	64	5·1303437	6·0845252	64	5·1199288	6·0734852
65	5·1153264	6·0552828	65	5·1049863	6·0443751	65	5·0945714	6·0333650
66	5·0884968	6·0131920	66	5·0781567	6·0023109	66	5·0677418	5·9913298
67	5·0600437	5·9690556	67	5·0497036	5·9582006	67	5·0392887	5·9472464
68	5·0298056	5·9227327	68	5·0194655	5·9119030	68	5·0090506	5·9009758
69	4·9976103	5·8740756	69	4·9872702	5·8632695	69	4·9768553	5·8523678
70	4·9632757	5·8229265	70	4·9529356	5·8121435	70	4·9425207	5·8012658
71	4·9266091	5·7691194	71	4·9162690	5·7583584	71	4·9058541	5·7475043
72	4·8874075	5·7124796	72	4·8770674	5·7017398	72	4·8666525	5·6909082
73	4·8454578	5·6528232	73	4·8351177	5·6421035	73	4·8247028	5·6312933
74	4·8005362	5·5899562	74	4·7901961	5·5792562	74	4·7797812	5·5684664
75	4·7524089	5·5236757	75	4·7420688	5·5129941	75	4·7316539	5·5022242
76	4·7008315	5·4537686	76	4·6904914	5·4431045	76	4·6800765	5·4323530
77	4·6455496	5·3800112	77	4·6352095	5·3693640	77	4·6247946	5·3586304
78	4·5862982	5·3021697	78	4·5759581	5·2915386	78	4·5655432	5·2808221
79	4·5228021	5·2200000	79	4·5124620	5·2093842	79	4·5020471	5·1986841
80	4·4547757	5·1332469	80	4·4444356	5·1226458	80	4·4340207	5·1119608
81	4·3819231	5·0416446	81	4·3715830	5·0310572	81	4·3611681	5·0203869
82	4·3039380	4·9449152	82	4·2935979	4·9343419	82	4·2831830	4·9236853
83	4·2205041	4·8427720	83	4·2101640	4·8322105	83	4·1997491	4·8215679
84	4·1312943	4·7349142	84	4·1209542	4·7243660	84	4·1105393	4·7137349
85	4·0359715	4·6210318	85	4·0256314	4·6104941	85	4·0152165	4·5998766
86	3·9341881	4·5008027	86	3·9238480	4·4902756	86	3·9134331	4·4796688
87	3·8255863	4·3738917	87	3·8152462	4·3633754	87	3·8048313	4·3527788
88	3·7097979	4·2399536	88	3·6994578	4·2294472	88	3·6890429	4·2188613
89	3·5864445	4·0986306	89	3·5761044	4·0881333	89	3·5656895	4·0775573
90	3·4551370	3·9495525	90	3·4447969	3·9390643	90	3·4343820	3·9284973
91	3·3154765	3·7923363	91	3·3051364	3·7818566	91	3·2947215	3·7712986
92	3·1670534	3·6265867	92	3·1567133	3·6161141	92	3·1462984	3·6055647
93	3·0094479	3·4518907	93	2·9991078	3·4414269	93	2·9886929	3·4308847
94	2·8422298	3·2678207	94	2·8318897	3·2573641	94	2·8214748	3·2468295
95	2·6649587	3·0739240	95	2·6546186	3·0634742	95	2·6442037	3·0529474
96	2·4771838	2·8697157	96	2·4668437	2·8592728	96	2·4564288	2·8487530
97	2·2784439	2·6546616	97	2·2681038	2·6442239	97	2·2576889	2·6337108
98	2·0682676	2·4281316	98	2·0579275	2·4177024	98	2·0475126	2·4071954
99	1·8461732	2·1893288	99	1·8358331	2·1789065	99	1·8254182	2·1684080
100	1·6116684	1·9371125	100	1·6013283	1·9266974	100	1·5909134	1·9162065
101	1·3642509	1·6696042	101	1·3539108	1·6591972	101	1·3434959	1·6487141
102	1·1034079	1·3832515	102	1·0930678	1·3728550	102	1·0826529	1·3623826
103	0·8286163	1·0703298	103	0·8182762	1·0599495	103	0·8078613	1·0494894
104	0·5393427	0·7109462	104	0·5290026	0·7005826	104	0·5185877	0·6901429
105	0·2350433		105	0·2247032		105	0·2142883	
106	9·9151641		106	9·9048240		106	9·8944091	
107	9·5791407		107	9·5688006		107	9·5583857	
108	9·2263984		108	9·2160583		108	9·2056434	
109	8·8563521		109	8·8460120		109	8·8355971	

JOINT LIVES :—TWO MALES.

Logarithms of the Series $D_{x,\ y}$ and $N_{x,\ y}$.

Age of (y)	27		28			29		
Age of (x)	λ $D_{x,\ 27}$	λ $N_{x,\ 27}$	Age of (x)	λ $D_{x,\ 28}$	λ $N_{x,\ 28}$	Age of (x)	λ $D_{x,\ 29}$	λ $N_{x,\ 29}$
0	6·0320750	7·1843070	0	6·0215075	7·1701094	0	6·0108607	7·1556845
1	5·9480728	7·1668323	1	5·9375053	7·1525883	1	5·9268585	7·1381144
2	5·9127919	7·1540117	2	5·9022244	7·1397623	2	5·8915776	7·1252808
3	5·8906786	7·1425891	3	5·8801111	7·1283472	3	5·8694643	7·1138725
4	5·8737769	7·1317941	4	5·8632094	7·1175670	4	5·8525626	7·1031059
5	5·8595495	7·1213398	5	5·8489820	7·1071316	5	5·8383352	7·0926895
6	5·8471883	7·1110820	6	5·8366208	7·0968965	6	5·8259740	7·0824766
7	5·8360448	7·1009204	7	5·8254773	7·0867601	7	5·8148305	7·0723654
8	5·8256306	7·0907873	8	5·8150631	7·0766550	8	5·8044163	7·0622875
9	5·8158832	7·0806406	9	5·8053157	7·0665383	9	5·7946689	7·0522002
10	5·8066480	7·0704398	10	5·7960805	7·0563686	10	5·7854337	7·0420622
11	5·7977835	7·0601499	11	5·7872160	7·0461122	11	5·7765692	7·0318381
12	5·7891615	7·0497435	12	5·7785940	7·0357398	12	5·7679472	7·0215006
13	5·7806670	7·0391972	13	5·7700995	7·0252301	13	5·7594527	7·0110263
14	5·7721981	7·0284940	14	5·7616306	7·0145642	14	5·7509838	7·0003980
15	5·7636663	7·0176218	15	5·7530988	7·0037306	15	5·7424520	6·9896027
16	5·7549960	7·0065713	16	5·7444285	6·9927205	16	5·7337817	6·9786325
17	5·7461252	6·9953383	17	5·7355577	6·9815291	17	5·7249109	6·9674827
18	5·7370047	6·9839217	18	5·7264372	6·9701557	18	5·7157904	6·9561521
19	5·7275989	6·9723227	19	5·7170314	6·9586011	19	5·7063846	6.9446429
20	5·7178851	6·9605455	20	5·7073176	6·9468706	20	5·6966708	6·9329584
21	5·7078539	6·9485953	21	5·6972864	6·9349684	21	5·6866396	6·9211044
22	5·6977423	6·9364782	22	5·6871748	6·9229016	22	5·6765280	6·9090877
23	5·6875530	6·9241867	23	5·6769855	6·9106620	23	5·6663387	6·8969004
24	5·6772878	6·9117127	24	5·6667203	6·8982415	24	5·6560735	6·8845339
25	5·6669477	6·8990469	25	5·6563802	6·8856311	25	5·6457334	6·8719794
26	5·6565328	6·8861800	26	5·6459653	6·8728209	26	5·6353185	6·8592272
27	5·6460424	6·8731017	27	5·6354749	6·8598008	27	5·6248281	6·8462664
28	5·6354749	6·8598008	28	5·6249074	6·8465601	28	5·6142606	6·8330864
29	5·6248281	6·8462664	29	5·6142606	6·8330864	29	5·6036138	6·8196753
30	5·6140987	6·8324863	30	5·6035312	6·8193680	30	5·5928844	6·8060206
31	5·6032827	6·8184470	31	5·5927152	6·8053922	31	5·5820684	6·7921093
32	5·5923752	6·8041361	32	5·5818077	6·7911448	32	5·5711609	6·7779279
33	5·5813705	6·7895392	33	5·5708030	6·7766120	33	5·5601562	6·7634616
34	5·5702621	6·7746412	34	5·5596946	6·7617790	34	5·5490478	6·7486957
35	5·5590426	6·7594271	35	5·5484751	6·7466297	35	5·5378283	6·7336143
36	5·5477038	6·7438805	36	5·5371363	6·7311481	36	5·5264895	6·7182004
37	5·5362366	6·7279841	37	5·5256691	6·7153171	37	5·5150223	6·7024371
38	5·5246312	6·7117201	38	5·5140637	6·6991180	38	5·5034169	6·6863061
39	5·5128768	6·6950696	39	5·5023093	6·6825318	39	5·4916625	6·6697879
40	5·5009620	6·6780128	40	5·4903945	6·6655390	40	5·4797477	6·6528622
41	5·4888743	6·6605284	41	5·4783068	6·6481180	41	5·4676600	6·6355081
42	5·4766005	6·6425944	42	5·4660330	6·6302464	42	5·4553862	6·6177027
43	5·4641265	6·6241866	43	5·4535590	6·6119009	43	5·4429122	6·5994222
44	5·4514376	6·6052805	44	5·4408701	6·5930553	44	5·4302233	6·5806417
45	5·4385179	6·5858488	45	5·4279504	6·5736835	45	5·4173036	6·5613332
46	5·4253509	6·5658629	46	5·4147834	6·5537566	46	5·4041366	6·5414686
47	5·4119192	6·5452920	47	5·4013517	6·5332432	47	5·3907049	6·5210165
48	5·3982046	6·5241027	48	5·3876371	6·5121105	48	5·3769903	6·4999437
49	5·3841880	6·5022591	49	5·3736205	6·4903223	49	5·3629737	6·4782145
50	5·3698496	6·4797224	50	5·3592821	6·4678392	50	5·3486353	6·4557892
51	5·3551686	6·4564501	51	5·3446011	6·4446193	51	5·3339543	6·4326252
52	5·3398789	6·4323950	52	5·3293114	6·4206160	52	5·3186646	6·4086764
53	5·3241444	6·4075279	53	5·3135769	6·3957987	53	5·3029301	6·3839130
54	5·3079178	6·3817998	54	5·2973803	6·3701194	54	5·2867335	6·3582856

JOINT LIVES:—Two Males.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	27			28			29	
Age of (x)	λ $D_{x,27}$	λ $N_{x,27}$	Age of (x)	λ $D_{x,28}$	λ $N_{x,28}$	Age of (x)	λ $D_{x,29}$	λ $N_{x,29}$
55	5·2912619	6·3551570	55	5·2806944	6·3435237	55	5·2700476	6·3317404
56	5·2740490	6·3275383	56	5·2634815	6·3159517	56	5·2528347	6·3042176
57	5·2562610	6·2988795	57	5·2456935	6·2873370	57	5·2350467	6·2756513
58	5·2378395	6·2691084	58	5·2272720	6·2576092	58	5·2166252	6·2459695
59	5·2187159	6·2381475	59	5·2081484	6·2266901	59	5·1975016	6·2150954
60	5·1988111	6·2059121	60	5·1882436	6·1944963	60	5·1775968	6·1829449
61	5·1780358	6·1723136	61	5·1674683	6·1609365	61	5·1568215	6·1494280
62	5·1562903	6·1372547	62	5·1457228	6·1259158	62	5·1350760	6·1144472
63	5·1334646	6·1006321	63	5·1228971	6·0893296	63	5·1122503	6·0779007
64	5·1094384	6·0623348	64	5·0988709	6·0510684	64	5·0882241	6·0396770
65	5·0840810	6·0222469	65	5·0735135	6·0110140	65	5·0628667	5·9996594
66	5·0572514	5·9802421	66	5·0466839	5·9690421	66	5·0360371	5·9577227
67	5·0287983	5·9361889	67	5·0182308	5·9250201	67	5·0075840	5·9137344
68	4·9985602	5·8899458	68	4·9879927	5·8788075	68	4·9773459	5·8675540
69	4·9663649	5·8413651	69	4·9557974	5·8302557	69	4·9451506	5·8190333
70	4·9320303	5·7902891	70	4·9214628	5·7792077	70	4·9108160	5·7680149
71	4·8953637	5·7365525	71	4·8847962	5·7254976	71	4·8741494	5·7143334
72	4·8561621	5·6799803	72	4·8455946	5·6689507	72	4·8349478	5·6578137
73	4·8142124	5·6203883	73	4·8036449	5·6093831	73	4·7929981	5·5982720
74	4·7692908	5·5575831	74	4·7587233	5·5466013	74	4·7480765	5·5355152
75	4·7211635	5·4913616	75	4·7105960	5·4804020	75	4·6999492	5·4693396
76	4·6695861	5·4215107	76	4·6590186	5·4105721	76	4·6483718	5·3995322
77	4·6143042	5·3478066	77	4·6037367	5·3368884	77	4·5930899	5·3258701
78	4·5550528	5·2700163	78	4·5444853	5·2591170	78	4·5338385	5·2481195
79	4·4915567	5·1878953	79	4·4809892	5·1770145	79	4·4703424	5·1660360
80	4·4235303	5·1011888	80	4·4129628	5·0903251	80	4·4023160	5·0793651
81	4·3506777	5·0096302	81	4·3401102	4·9987832	81	4·3294634	4·9878410
82	4·2726926	4·9129433	82	4·2621251	4·9021117	82	4·2514783	4·8911861
83	4·1892587	4·8108399	83	4·1786912	4·8000232	83	4·1680444	4·7891130
84	4·1000489	4·7030204	84	4·0894814	4·6922184	84	4·0788346	4·6813227
85	4·0047261	4·5891741	85	3·9941586	4·5783852	85	3·9835118	4·5675045
86	3·9029427	4·4689790	86	3·8923752	4·4582023	86	3·8817284	4·4473354
87	3·7943409	4·3421004	87	3·7837734	4·3313362	87	3·7731266	4·3204815
88	3·6785525	4·2081927	88	3·6679850	4·1974402	88	3·6573382	4·1865982
89	3·5551991	4·0668996	89	3·5446316	4·0561568	89	3·5339848	4·0453265
90	3·4238916	3·9178494	90	3·4133241	3·9071178	90	3·4026773	3·8962969
91	3·2842311	3·7606600	91	3·2736636	3·7499380	91	3·2630168	3·7391283
92	3·1358080	3·5949348	92	3·1252405	3·5842215	92	3·1145937	3·5734228
93	2·9782025	3·4202631	93	2·9676350	3·4095590	93	2·9569882	3·3987683
94	2·8109844	3·2362157	94	2·8004169	3·2255196	94	2·7897701	3·2147382
95	2·6337133	3·0423408	95	2·6231458	3·0316528	95	2·6124990	3·0208794
96	2·4459384	2·8381543	96	2·4353709	2·8274740	96	2·4247241	2·8167085
97	2·2471985	2·6231200	97	2·2366310	2·6124469	97	2·2259842	2·6016896
98	2·0370222	2·3966107	98	2·0264547	2·3859457	98	2·0158079	2·3751971
99	1·8149278	2·1578308	99	1·8043603	2·1471734	99	1·7937135	2·1364326
100	1·5804230	1·9056383	100	1·5698555	1·8949892	100	1·5592087	1·8842571
101	1·3330055	1·6381557	101	1·3224380	1·6275174	101	1·3117912	1·6167947
102	1·0721625	1·3518330	102	1·0615950	1·3412069	102	1·0509482	1·3304990
103	0·7973709	1·0389538	103	0·7868034	1·0283394	103	0·7761566	1·0176468
104	0·5080973	0·6796277	104	0·4975298	0·6690285	104	0·4868830	0·6583549
105	0·2037979		105	0·1932304		105	0·1825836	
106	9·8839187		106	9·8733512		106	9·8627044	
107	9·5478953		107	9·5373278		107	9·5266810	
108	9·1951530		108	9·1845855		108	9·1739387	
109	8·8251067		109	8·8145392		109	8·8038924	

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	30		31			32		
Age of (x)	λ $D_{x,30}$	λ $N_{x,30}$	Age of (x)	λ $D_{x,31}$	λ $N_{x,31}$	Age of (x)	λ $D_{x,32}$	λ $N_{x,32}$
0	6·0001313	7·1410228	0	5·9893153	7·1261132	0	5·9784078	7·1109438
1	5·9161291	7·1233995	1	5·9053131	7·1084327	1	5·8944056	7·0932024
2	5·8808482	7·1105570	2	5·8700322	7·0955797	2	5·8591247	7·0803371
3	5·8587349	7·0991545	3	5·8479189	7·0841818	3	5·8370114	7·0689428
4	5·8418332	7·0884012	4	5·8310172	7·0734412	4	5·8201097	7·0582138
5	5·8276058	7·0780027	5	5·8167898	7·0630601	5	5·8058823	7·0478497
6	5·8152446	7·0678119	6	5·8044286	7·0528905	6	5·7935211	7·0377013
7	5·8041011	7·0577255	7	5·7932851	7·0428286	7	5·7823776	7·0276631
8	5·7936869	7·0476747	8	5·7828709	7·0328044	8	5·7719634	7·0176656
9	5·7839395	7·0376165	9	5·7731235	7·0227751	9	5·7622160	7·0076650
10	5·7747043	7·0275090	10	5·7638883	7·0126988	10	5·7529808	6·9976187
11	5·7658398	7·0173180	11	5·7550238	7·0025401	11	5·7441163	6·9874920
12	5·7572178	7·0070147	12	5·7464018	6·9922704	12	5·7354943	6·9772558
13	5·7487233	6·9965759	13	5·7379073	6·9818667	13	5·7269998	6·9668871
14	5·7402544	6·9859841	14	5·7294384	6·9713118	14	5·7185309	6·9563684
15	5·7317226	6·9752274	15	5·7209066	6·9605926	15	5·7099991	6·9456870
16	5·7230523	6·9642966	16	5·7122363	6·9497015	16	5·7013288	6·9348346
17	5·7141815	6·9531880	17	5·7033655	6·9386336	17	5·6924580	6·9238074
18	5·7050610	6·9419003	18	5·6942450	6·9273884	18	5·6833375	6·9126041
19	5·6956552	6·9304353	19	5·6848392	6·9159677	19	5·6739317	6·9012272
20	5·6859414	6·9187973	20	5·6751254	6·9043756	20	5·6642179	6·8896812
21	5·6759102	6·9069917	21	5·6650942	6·8926184	21	5·6541867	6·8779716
22	5·6657986	6·8950252	22	5·6549826	6·8807023	22	5·6440751	6·8661060
23	5·6556093	6·8828903	23	5·6447933	6·8686197	23	5·6338858	6·8540760
24	5·6453441	6·8705785	24	5·6345281	6·8563626	24	5·6236206	6·8418736
25	5·6350040	6·8580804	25	5·6241880	6·8439216	25	5·6132805	6·8294895
26	5·6245891	6·8453864	26	5·6137731	6·8312865	26	5·6028656	6·8169141
27	5·6140987	6·8324863	27	5·6032827	6·8184470	27	5·5923752	6·8041361
28	5·6035312	6·8193680	28	5·5927152	6·8053922	28	5·5818077	6·7911448
29	5·5928844	6·8060206	29	5·5820684	6·7921093	29	5·5711609	6·7779279
30	5·5821550	6·7924312	30	5·5713390	6·7785863	30	5·5604315	6·7644724
31	5·5713390	6·7785863	31	5·5605230	6·7648097	31	5·5496155	6·7507653
32	5·5604315	6·7644724	32	5·5496155	6·7507653	32	5·5387080	6·7367922
33	5·5494268	6·7500752	33	5·5386108	6·7364385	33	5·5277033	6·7225379
34	5·5383184	6·7353785	34	5·5275024	6·7218140	34	5·5165949	6·7079871
35	5·5270989	6·7203672	35	5·5162829	6·7068750	35	5·5053754	6·6931234
36	5·5157601	6·7050242	36	5·5049441	6·6916053	36	5·4940366	6·6779293
37	5·5042929	6·6893317	37	5·4934769	6·6759869	37	5·4825694	6·6623875
38	5·4926875	6·6732714	38	5·4818715	6·6600006	38	5·4709640	6·6464784
39	5·4809331	6·6568244	39	5·4701171	6·6436273	39	5·4592096	6·6301826
40	5·4690183	6·6399696	40	5·4582023	6·6268469	40	5·4472948	6·6134792
41	5·4569306	6·6226856	41	5·4461146	6·6096369	41	5·4352071	6·5963467
42	5·4446568	6·6049501	42	5·4338408	6·5919746	42	5·4229333	6·5787618
43	5·4321828	6·5867387	43	5·4213668	6·5738361	43	5·4104593	6·5606998
44	5·4194939	6·5680260	44	5·4086779	6·5551955	44	5·3977704	6·5421354
45	5·4065742	6·5487854	45	5·3957582	6·5360258	45	5·3848507	6·5230408
46	5·3934072	6·5289866	46	5·3825912	6·5162978	46	5·3716837	6·5033870
47	5·3799755	6·5085997	47	5·3691595	6·4959798	47	5·3582520	6·4831428
48	5·3662609	6·4875909	48	5·3554449	6·4750389	48	5·3445374	6·4622737
49	5·3522443	6·4659241	49	5·3414283	6·4534388	49	5·3305208	6·4407444
50	5·3379059	6·4435602	50	5·3270899	6·4311400	50	5·3161824	6·4185153
51	5·3232249	6·4204566	51	5·3124089	6·4081001	51	5·3015014	6·3955433
52	5·3079352	6·3965659	52	5·2971192	6·3842723	52	5·2862117	6·3717819
53	5·2922007	6·3718592	53	5·2813847	6·3596262	53	5·2704772	6·3472012
54	5·2760041	6·3462879	54	5·2651881	6·3341140	54	5·2542806	6·3217521

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	30		31			32		
Age of (x)	$\lambda\ D_{x,\,30}$	$\lambda\ N_{x,\,30}$	Age of (x)	$\lambda\ D_{x,\,31}$	$\lambda\ N_{x,\,31}$	Age of (x)	$\lambda\ D_{x,\,32}$	$\lambda\ N_{x,\,32}$
55	5·2593182	6·3197969	55	5·2485022	6·3076813	55	5·2375947	6·2953810
56	5·2421053	6·2923265	56	5·2312893	6·2802673	56	5·2203818	6·2680277
57	5·2243173	6·2638114	57	5·2135013	6·2518068	57	5·2025938	6·2396261
58	5·2058958	6·2341798	58	5·1950798	6·2222283	58	5·1841723	6·2101041
59	5·1867722	6·2033533	59	5·1759562	6·1914541	59	5·1650487	6·1793852
60	5·1668674	6·1712495	60	5·1560514	6·1593996	60	5·1451439	6·1473851
61	5·1460921	6·1377774	61	5·1352761	6·1259762	61	5·1243686	6·1140125
62	5·1243466	6·1028410	62	5·1135306	6·0910863	62	5·1026231	6·0791729
63	5·1015209	6·0663360	63	5·0907049	6·0546269	63	5·0797974	6·0427617
64	5·0774947	6·0281534	64	5·0666787	6·0164872	64	5·0557712	6·0046691
65	5·0521373	5·9881744	65	5·0413213	5·9765508	65	5·0304138	5·9647771
66	5·0253077	5·9462754	66	5·0144917	5·9346918	66	5·0035842	5·9229620
67	4·9968546	5·9023232	67	4·9860386	5·8907783	67	4·9751311	5·8790898
68	4·9666165	5·8561778	68	4·9558005	5·8446699	68	4·9448930	5·8330215
69	4·9344212	5·8076902	69	4·9236052	5·7962183	69	4·9126977	5·7846080
70	4·9000866	5·7567038	70	4·8892706	5·7452659	70	4·8783631	5·7336925
71	4·8634200	5·7030525	71	4·8526040	5·6916475	71	4·8416965	5·6801091
72	4·8242184	5·6465623	72	4·8134024	5·6351882	72	4·8024949	5·6236834
73	4·7822687	5·5870484	73	4·7714527	5·5757045	73	4·7605452	5·5642315
74	4·7373471	5·5243178	74	4·7265311	5·5130022	74	4·7156236	5·5015602
75	4·6892198	5·4581678	75	4·6784038	5·4468793	75	4·6674963	5·4354661
76	4·6376424	5·3883847	76	4·6268264	5·3771222	76	4·6159189	5·3657367
77	4·5823605	5·3147455	77	4·5715445	5·3035077	77	4·5606370	5·2921488
78	4·5231091	5·2370169	78	4·5122931	5·2258025	78	4·5013856	5·2144688
79	4·4596130	5·1549544	79	4·4487970	5·1437625	79	4·4378895	5·1324524
80	4·3915866	5·0683028	80	4·3807706	5·0571327	80	4·3698631	5·0458454
81	4·3187340	4·9767974	81	4·3079180	4·9656466	81	4·2970105	4·9543819
82	4·2407489	4·8801611	82	4·2299329	4·8690292	82	4·2190254	4·8577841
83	4·1573150	4·7781049	83	4·1464990	4·7669918	83	4·1355915	4·7557659
84	4·0681052	4·6703303	84	4·0572892	4·6592343	84	4·0463817	4·6480271
85	3·9727824	4·5565273	85	3·9619664	4·5454474	85	3·9510589	4·5342575
86	3·8709990	4·4363724	86	3·8601830	4·4253075	86	3·8492755	4·4141347
87	3·7623972	4·3095324	87	3·7515812	4·2984823	87	3·7406737	4·2873244
88	3·6466088	4·1756613	88	3·6357928	4·1646253	88	3·6248853	4·1534823
89	3·5232554	4·0344026	89	3·5124394	4·0233788	89	3·5015319	4·0122503
90	3·3919479	3·8853849	90	3·3811319	3·8743739	90	3·3702244	3·8632580
91	3·2522874	3·7282255	91	3·2414714	3·7172276	91	3·2305639	3·7061244
92	3·1038643	3·5625308	92	3·0930483	3·5515415	92	3·0821408	3·5404521
93	2·9462588	3·3878870	93	2·9354428	3·3769089	93	2·9245353	3·3658289
94	2·7790407	3·2038659	94	2·7682247	3·1928987	94	2·7573172	3·1818287
95	2·6017696	3·0100166	95	2·5909536	2·9990583	95	2·5800461	2·9879999
96	2·4139947	2·8058541	96	2·4031787	2·7949054	96	2·3922712	2·7838564
97	2·2152548	2·5908429	97	2·2044388	2·5799036	97	2·1935313	2·5688644
98	2·0050785	2·3643596	98	1·9942625	2·3534284	98	1·9833550	2·3423988
99	1·7829841	2·1256039	99	1·7721681	2·1146827	99	1·7612606	2·1036628
100	1·5484793	1·8734381	100	1·5376633	1·8625267	100	1·5267558	1·8515176
101	1·3010618	1·6059866	101	1·2902458	1·5950871	101	1·2793383	1·5840903
102	1·0402188	1·3197014	102	1·0294028	1·3088161	102	1·0184953	1·2978349
103	0·7654272	1·0068724	103	0·7546112	0·9959991	103	0·7437037	0·9850356
104	0·4761536	0·6475981	104	0·4653376	0·6367586	104	0·4544301	0·6258164
105	0·1718542		105	0·1610382		105	0·1501307	
106	9·8519750		106	9·8411590		106	9·8302515	
107	9·5159516		107	9·5051356		107	9·4942281	
108	9·1632093		108	9·1523933		108	9·1414858	
109	8·7931630		109	8·7823470		109	8·7714395	

JOINT LIVES :—TWO MALES.

Logarithms of the Series $D_{x, y}$ and $N_{x, y}$.

Age of (y)	33			34			35	
Age of (x)	$\lambda\ D_{x,\ 33}$	$\lambda\ N_{x,\ 33}$	Age of (x)	$\lambda\ D_{x,\ 34}$	$\lambda\ N_{x,\ 34}$	Age of (x)	$\lambda\ D_{x,\ 35}$	$\lambda\ N_{x,\ 35}$
0	5·9674031	7·0955023	0	5·9562947	7·0797759	0	5·9450752	7·0637503
1	5·8834009	7·0776960	1	5·8722925	7·0618994	1	5·8610730	7·0457992
2	5·8481200	7·0648165	2	5·8370116	7·0490039	· 2	5·8257921	7·0328854
3	5·8260067	7·0534242	3	5·8148983	7·0376133	3	5·8036788	7·0214953
4	5·8091050	7·0427062	4	5·7979966	7·0269053	4	5·7867771	7·0107963
5	5·7948776	7·0323589	5	5·7837692	7·0165737	5	5·7725497	7·0004797
6	5·7825164	7·0222308	6	5·7714080	7·0064655	6	5·7601885	6·9903914
7	5·7713729	7·0122161	7	5·7602645	6·9964743	7	5·7490450	6·9804231
8	5·7609587	7·0022448	8	5·7498503	6·9865288	8	5·7386308	6·9705029
9	5·7512113	6·9922725	9	5·7401029	6·9765842	9	5·7288834	6·9605862
10	5·7419761	6·9822564	10	5·7308677	6·9665982	10	5·7196482	6·9506296
11	5·7331116	6·9721614	11	5·7220032	6·9565346	11	5·7107837	6·9405973
12	5·7244896	6·9619583	12	5·7133812	6·9463644	12	5·7021617	6·9304595
13	5·7159951	6·9516242	13	5·7048867	6·9360644	13	5·6936672	6·9201934
14	5·7075262	6·9411413	14	5·6964178	6·9256170	14	5·6851983	6·9097810
15	5·6989944	6·9304971	15	5·6878860	6·9150095	15	5·6766665	6·8992099
16	5·6903241	6·9196834	16	5·6792157	6·9042339	16	5·6679962	6·8884718
17	5·6814533	6·9086960	17	5·6703449	6·8932864	17	5·6591254	6·8775633
18	5·6723328	6·8975347	18	5·6612244	6·8821659	18	5·6500049	6·8664839
19	5·6629270	6·8862012	19	5·6518186	6·8708757	19	5·6405991	6·8552357
20	5·6532132	6·8747005	20	5·6421048	6·8594198	20	5·6308853	6·8438247
21	5·6431820	6·8630388	21	5·6320736	6·8478052	21	5·6208541	6·8322567
22	5·6330704	6·8512227	22	5·6219620	6·8360391	22	5·6107425	6·8205396
23	5·6228811	6·8392454	23	5·6117727	6·8241136	23	5·6005532	6·8086662
24	5·6126159	6·8270978	24	5·6015075	6·8120209	24	5·5902880	6·7966274
25	5·6022758	6·8147709	25	5·5911674	6·7997512	25	5·5799479	6·7844151
26	5·5918609	6·8022549	26	5·5807525	6·7872948	26	5·5695330	6·7720184
27	5·5813705	6·7895392	27	5·5702621	6·7746412	27	5·5590426	6·7594271
28	5·5708030	6·7766120	28	5·5596946	6·7617790	28	5·5484751	6·7466297
29	5·5601562	6·7634616	29	5·5490478	6·7486957	29	5·5378283	6·7336143
30	5·5494268	6·7500752	30	5·5383184	6·7353785	30	5·5270989	6·7203672
31	5·5386108	6·7364385	31	5·5275024	6·7218140	31	5·5162829	6·7068750
32	5·5277033	6·7225379	32	5·5165949	6·7079871	32	5·5053754	6·6931234
33	5·5166986	6·7083580	33	5·5055902	6·6938830	33	5·4943707	6·6790965
34	5·5055902	6·6938830	34	5·4944818	6·6794857	34	5·4832623	6·6647783
35	5·4943707	6·6790965	35	5·4832623	6·6647783	35	5·4720428	6·6501522
36	5·4830319	6·6639811	36	5·4719235	6·6497434	36	5·4607040	6·6352000
37	5·4715647	6·6485180	37	5·4604563	6·6343627	37	5·4492368	6·6199034
38	5·4599593	6·6326892	38	5·4488509	6·6186163	38	5·4376314	6·6042431
39	5·4482049	6·6164739	39	5·4370965	6·6024849	39	5·4258770	6·5881976
40	5·4362901	6·5998514	40	5·4251817	6·5859465	40	5·4139622	6·5717469
41	5·4242024	6·5827996	41	5·4130940	6·5689792	41	5·4018745	6·5548675
42	5·4119286	6·5652957	42	5·4008202	6·5515596	42	5·3896007	6·5375362
43	5·3994546	6·5473144	43	5·3883462	6·5336628	43	5·3771267	6·5197276
44	5·3867657	6·5288298	44	5·3756573	6·5152628	44	5·3644378	6·5014156
45	5·3738460	6·5098148	45	5·3627376	6·4963310	45	5·3515181	6·4825722
46	5·3606790	6·4902395	46	5·3495706	6·4768387	46	5·3383511	6·4631669
47	5·3472473	6·4700726	47	5·3361389	6·4567539	47	5·3249194	6·4431688
48	5·3335327	6·4492805	48	5·3224243	6·4360426	48	5·3112048	6·4225430
49	5·3195161	6·4278262	49	5·3084077	6·4146686	49	5·2971882	6·4012533
50	5·3051777	6·4056707	50	5·2940693	6·3925913	50	5·2828498	6·3792599
51	5·2904967	6·3827714	51	5·2793883	6·3697688	51	5·2681688	6·3565190
52	5·2752070	6·3590808	52	5·2640986	6·3461538	52	5·2528791	6·3329841
53	5·2594725	6·3345696	53	5·2483641	6·3217163	53	5·2371446	6·3086254
54	5·2432759	6·3091887	54	5·2321675	6·2964078	54	5·2209480	6·2833940

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	33			34			35	
Age of (x)	$\lambda D_{x,33}$	$\lambda N_{x,33}$	Age of (x)	$\lambda D_{x,34}$	$\lambda N_{x,34}$	Age of (x)	$\lambda D_{x,35}$	$\lambda N_{x,35}$
55	5·2265900	6·2828833	55	5·2154816	6·2701734	55	5·2042621	6·2572352
56	5·2093771	6·2555943	56	5·1982687	6·2429529	56	5·1870492	6·2300886
57	5·1915891	6·2272554	57	5·1804807	6·2146809	57	5·1692612	6·2018880
58	5·1731676	6·1977949	58	5·1620592	6·1852860	58	5·1508397	6·1725624
59	5·1540440	6·1671347	59	5·1429356	6·1546893	59	5·1317161	6·1420342
60	5·1341392	6·1351918	60	5·1230308	6·1228078	60	5·1118113	6·1102182
61	5·1133639	6·1018759	61	5·1022555	6·0895512	61	5·0910360	6·0770254
62	5·0916184	6·0670892	62	5·0805100	6·0548229	62	5·0692905	6·0423589
63	5·0687927	6·0307300	63	5·0576843	6·0185188	63	5·0464648	6·0061150
64	5·0447665	5·9926874	64	5·0336581	5·9805297	64	5·0224386	5·9681831
65	5·0194091	5·9528438	65	5·0083007	5·9407381	65	4·9970812	5·9284472
66	4·9925795	5·9110747	66	4·9814711	5·8990189	66	4·9702516	5·8867813
67	4·9641264	5·8672474	67	4·9530180	5·8552394	67	4·9417985	5·8430536
68	4·9338883	5·8212219	68	4·9227799	5·8092600	68	4·9115604	5·7971234
69	4·9016930	5·7728496	69	4·8905846	5·7609317	69	4·8793651	5·7488425
70	4·8673584	5·7219732	70	4·8562500	5·7100977	70	4·8450305	5·6980538
71	4·8306918	5·6684277	71	4·8195834	5·6565926	71	4·8083639	5·6445922
72	4·7914902	5·6120379	72	4·7803818	5·6002417	72	4·7691623	5·5882828
73	4·7495405	5·5526206	73	4·7384321	5·5408611	73	4·7272126	5·5289421
74	4·7046189	5·4899819	74	4·6935105	5·4782577	74	4·6822910	5·4663765
75	4·6564916	5·4239194	75	4·6453832	5·4122287	75	4·6341637	5·4003837
76	4·6049142	5·3542196	76	4·5938058	5·3425612	76	4·5825863	5·3307505
77	4·5496323	5·2806601	77	4·5385239	5·2690322	77	4·5273044	5·2572544
78	4·4903809	5·2030071	78	4·4792725	5·1914080	78	4·4680530	5·1796616
79	4·4268848	5·1210166	79	4·4157764	5·1094449	79	4·4045569	5·0977279
80	4·3588584	5·0344335	80	4·3477500	5·0228884	80	4·3365305	5·0111995
81	4·2860058	4·9429931	81	4·2748974	4·9314726	81	4·2636779	4·9198105
82	4·2080207	4·8464181	82	4·1969123	4·8349214	82	4·1856928	4·8232845
83	4·1245868	4·7444198	83	4·1134784	4·7329459	83	4·1022589	4·7213332
84	4·0353770	4·6367015	84	4·0242686	4·6252476	84	4·0130491	4·6136579
85	3·9400542	4·5229503	85	3·9289458	4·5115170	85	3·9177263	4·4999484
86	3·8382708	4·4028451	86	3·8271624	4·3914309	86	3·8159429	4·3798827
87	3·7296690	4·2760521	87	3·7185606	4·2646559	87	3·7073411	4·2531271
88	3·6138806	4·1422252	88	3·6027722	4·1308466	88	3·5915527	4·1193361
89	3·4905272	4·0010081	89	3·4794188	3·9896447	89	3·4681993	3·9781522
90	3·3592197	3·8520308	90	3·3481113	3·8406825	90	3·3368918	3·8292054
91	3·2195592	3·6949096	91	3·2084508	3·6835765	91	3·1972313	3·6721145
92	3·0711361	3·5292506	92	3·0600277	3·5179305	92	3·0488082	3·5064834
93	2·9135306	3·3546395	93	2·9024222	3·3433332	93	2·8912027	3·3319002
94	2·7463125	3·1706510	94	2·7352041	3·1593566	94	2·7239846	3·1479378
95	2·5690414	2·9768321	95	2·5579330	2·9655497	95	2·5467135	2·9541431
96	2·3812665	2·7727008	96	2·3701581	2·7614286	96	2·3589386	2·7500345
97	2·1825266	2·5577189	97	2·1714182	2·5464600	97	2·1601987	2·5350763
98	1·9723503	2·3312633	98	1·9612419	2·3200148	98	1·9500224	2·3086445
99	1·7502559	2·0925382	99	1·7391475	2·0813012	99	1·7279280	2·0699433
100	1·5157511	1·8404041	100	1·5046427	1·8291796	100	1·4934232	1·8178356
101	1·2683336	1·5729900	101	1·2572252	1·5617785	101	1·2460057	1·5504497
102	1·0074906	1·2867505	102	0·9963822	1·2755555	102	0·9851627	1·2642439
103	0·7326990	0·9739725	103	0·7215906	0·9628001	103	0·7103711	0·9515124
104	0·4434254	0·6147707	104	0·4323170	0·6036315	104	0·4210975	0·5923766
105	0·1391260		105	0·1280176		105	0·1167981	
106	9·8192468		106	9·8081384		106	9·7969189	
107	9·4832234		107	9·4721150		107	9·4608955	
108	9·1304811		108	9·1193727		108	9·1081532	
109	8·7604348		109	8·7493264		109	8·7381069	

JOINT LIVES:—TWO MALES.

Logarithms of the Series $D_{x, y}$ and $N_{x, y}$.

Age of (y)	36		37			38		
Age of (x)	$\lambda\ D_{x,\ 36}$	$\lambda\ N_{x,\ 36}$	**Age** of (x)	$\lambda\ D_{x,\ 37}$	$\lambda\ N_{x,\ 37}$	**Age** of (x)	$\lambda\ D_{x,\ 38}$	$\lambda\ N_{x,\ 38}$
0	5·9337364	7·0474104	0	5·9222692	7·0307410	0	5·9106638	7·0137252
1	5·8497342	7·0293801	1	5·8382670	7·0126260	1	5·8266616	6·9955196
2	5·8144533	7·0164462	2	5·8029861	6·9996696	2	5·7913807	6·9825385
3	5·7923400	7·0050543	3	5·7808728	6·9882753	3	5·7692674	6·9711405
4	5·7754383	6·9943644	4	5·7639711	6·9775926	4	5·7523657	6·9604645
5	5·7612109	6·9840625	5	5·7497437	6·9673050	5	5·7381383	6·9501899
6	5·7488497	6·9739929	6	5·7373825	6·9572542	6	5·7257771	6·9401576
7	5·7377062	6·9640471	7	5·7262390	6·9473302	7	5·7146336	6·9302556
8	5·7272920	6·9541522	8	5·7158248	6·9374601	8	5·7042194	6·9204097
9	5·7175446	6·9442628	9	5·7060774	6·9275979	9	5·6944720	6·9105743
10	5·7083094	6·9343355	10	5·6968422	6·9176996	10	5·6852368	6·9007048
11	5·6994449	6·9243339	11	5·6879777	6·9077286	11	5·6763723	6·8907640
12	5·6908229	6·9142286	12	5·6793557	6·8976551	12	5·6677503	6·8807223
13	5·6823284	6·9039957	13	5·6708612	6·8874555	13	5·6592558	6·8705554
14	5·6738595	6·8936181	14	5·6623923	6·8771120	14	5·6507869	6·8602458
15	5·6653277	6·8830828	15	5·6538605	6·8666122	15	5·6422551	6·8497809
16	5·6566574	6·8723820	16	5·6451902	6·8559480	16	5·6335848	6·8391529
17	5·6477866	6·8615119	17	5·6363194	6·8451160	17	5·6247140	6·8283582
18	5·6386661	6·8504725	18	5·6271989	6·8341160	18	5·6155935	6·8173973
19	5·6292603	6·8392666	19	5·6177931	6·8229514	19	5·6061877	6·8062732
20	5·6195465	6·8278992	20	5·6080793	6·8116275	20	5·5964739	6·7949919
21	5·6095153	6·8163777	21	5·5980481	6·8001511	21	5·5864427	6·7835606
22	5·5994037	6·8047091	22	5·5879365	6·7885312	22	5·5763311	6·7719877
23	5·5892144	6·7928867	23	5·5777472	6·7767594	23	5·5661418	6.7602664
24	5·5789492	6·7809023	24	5·5674820	6·7648282	24	5·5558766	6·7483880
25	5·5686091	6·7687463	25	5·5571419	6·7527287	25	5·5455365	6·7363441
26	5·5581942	6·7564095	26	5·5467270	6·7404508	26	5·5351216	6·7241251
27	5·5477038	6·7438805	27	5·5362366	6·7279841	27	5·5246312	6·7117201
28	5·5371363	6·7311481	28	5·5256691	6·7153171	28	5·5140637	6·6991180
29	5·5264895	6·7182004	29	5·5150223	6·7024371	29	5·5034169	6·6863061
30	5·5157601	6·7050242	30	5·5042929	6·6893317	30	5·4926875	6·6732714
31	5·5049141	6·6916053	31	5·4934769	6·6759869	31	5·4818715	6·6600006
32	5·4940366	6·6779293	32	5·4825694	6·6623875	32	5·4709640	6·6464784
33	5·4830319	6·6639811	33	5·4715647	6·6485180	33	5·4599593	6·6326892
34	5·4719235	6·6497434	34	5·4604563	6·6343627	34	5·4488509	6·6186163
35	5·4607040	6·6352000	35	5·4492368	6·6199034	35	5·4376314	6·6042431
36	5·4493652	6·6203329	36	5·4378980	6·6051226	36	5·4262926	6·5895502
37	5·4378980	6·6051226	37	5·4264308	6·5900013	37	5·4148254	6·5745191
38	5·4262926	6·5895502	38	5·4148254	6·5745191	38	5·4032200	6·5591297
39	5·4145382	6·5735947	39	5·4030710	6·5586556	39	5·3914656	6·5433606
40	5·4026234	6·5572339	40	5·3911562	6·5423888	40	5·3795508	6·5271898
41	5·3905357	6·5404462	41	5·3790685	6·5256948	41	5·3674631	6·5105941
42	5·3782619	6·5232065	42	5·3667947	6·5085511	42	5·3551893	6·4935486
43	5·3657879	6·5054902	43	5·3543207	6·4909307	43	5·3427153	6·4760282
44	5·3530990	6·4872705	44	5·3416318	6·4728073	44	5·3300264	6·4580052
45	5·3401793	6·4685190	45	5·3287121	6·4541524	45	5·3171067	6·4394508
46	5·3270123	6·4492060	46	5·3155451	6·4349352	46	5·3039397	6·4203348
47	5·3135806	6·4292987	47	5·3021134	6·4151245	47	5·2905080	6·4006240
48	5·2998660	6·4087636	48	5·2883988	6·3946842	48	5·2767934	6·3802845
49	5·2858494	6·3875632	49	5·2743822	6·3735783	49	5·2627768	6·3592778
50	5·2715110	6·3656577	50	5·2600438	6·3517662	50	5·2484384	6·3375643
51	5·2568300	6·3430043	51	5·2453628	6·3292044	51	5·2337574	6·3151001
52	5·2415403	6·3195545	52	5·2300731	6·3058458	52	5·2184677	6·2918371
53	5·2258058	6·2952793	53	5·2143386	6·2816597	53	5·2027332	6·2677461
54	5·2096092	6·2701301	54	5·1981420	6·2565975	54	5·1865366	6·2427766

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Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	36		37			38		
Age of (x)	$\lambda D_{x,36}$	$\lambda N_{x,36}$	Age of (x)	$\lambda D_{x,37}$	$\lambda N_{x,37}$	Age of (x)	$\lambda D_{x,38}$	$\lambda N_{x,38}$
55	5·1929233	6·2440516	55	5·1814561	6·2306048	55	5·1698507	6·2168746
56	5·1757104	6·2169839	56	5·1642432	6·2036206	56	5·1526378	6·1899802
57	5·1579224	6·1888602	57	5·1464552	6·1755791	57	5·1348498	6·1620258
58	5·1395009	6·1596090	58	5·1280337	6·1464080	58	5·1164283	6·1329400
59	5·1203773	6·1291528	59	5·1089101	6·1160293	59	5·0973047	6·1026450
60	5·1004725	6·0974083	60	5·0890053	6·0843596	60	5·0773999	6·0710557
61	5·0796972	6·0642835	61	5·0682300	6·0513088	61	5·0566246	6·0380830
62	5·0579517	6·0296828	62	5·0464845	6·0167789	62	5·0348791	6·0036298
63	5·0351260	5·9935033	63	5·0236588	5·9806677	63	5·0120534	5·9675920
64	5·0110998	5·9556338	64	4·9996326	5·9428647	64	4·9880272	5·9298598
65	4·9857424	5·9159569	65	4·9742752	5·9032520	65	4·9626698	5·8903160
66	4·9589128	5·8743484	66	4·9474456	5·8617051	66	4·9358402	5·8488354
67	4·9304597	5·8306758	67	4·9189925	5·8180919	67	4·9073871	5·8052856
68	4·9002216	5·7847988	68	4·8887544	5·7722718	68	4·8771490	5·7595268
69	4·8680263	5·7365688	69	4·8565591	5·7240966	69	4·8449537	5·7114103
70	4·8336917	5·6858291	70	4·8222245	5·6734092	70	4·8106191	5·6607795
71	4·7970251	5·6324140	71	4·7855579	5·6200445	71	4·7739525	5·6074687
72	4·7578235	5·5761495	72	4·7463563	5·5638277	72	4·7347509	5·5513037
73	4·7158738	5·5168513	73	4·7044066	5·5045756	73	4·6928012	5·4921007
74	4·6709522	5·4543267	74	4·6594850	5·4420947	74	4·6478796	5·4296672
75	4·6228249	5·3883724	75	4·6113577	5·3761826	75	4·5997523	5·3637995
76	4·5712475	5·3187765	76	4·5597803	5·3066259	76	4·5481749	5·2942863
77	4·5159656	5·2453152	77	4·5044984	5·2332027	77	4·4928930	5·2209035
78	4·4567142	5·1677559	78	4·4452470	5·1556794	78	4·4336416	5·1434190
79	4·3932181	5·0858545	79	4·3817509	5·0738122	79	4·3701455	5·0615882
80	4·3251917	4·9993559	80	4·3137245	4·9873462	80	4·3021191	4·9751578
81	4·2523391	4·9079957	81	4·2408719	4·8960167	81	4·2292665	4·8838612
82	4·1743540	4·8114966	82	4·1628868	4·7995473	82	4·1512814	4·7874229
83	4·0909201	4·7095718	83	4·0794529	4·6976495	83	4·0678475	4·6855555
84	4·0017103	4·6019210	84	3·9902431	4·5900250	84	3·9786377	4·5779592
85	3·9063875	4·4882343	85	3·8949203	4·4763637	85	3·8833149	4·4643243
86	3·8046041	4·3681904	86	3·7931369	4·3563432	86	3·7815315	4·3443292
87	3·6960023	4·2414557	87	3·6845351	4·2296304	87	3·6729297	4·2176403
88	3·5802139	4·1076844	88	3·5687467	4·0958804	88	3·5571413	4·0839127
89	3·4568605	3·9665191	89	3·4453933	3·9547354	89	3·4337879	3·9427891
90	3·3255530	3·8175905	90	3·3140858	3·8058256	90	3·3024804	3·7939000
91	3·1858925	3·6605155	91	3·1744253	3·6487697	91	3·1628199	3·6368628
92	3·0374694	3·4949000	92	3·0260022	3·4831692	92	3·0143968	3·4712829
93	2·8798639	3·3203322	93	2·8683967	3·3086184	93	2·8567913	3·2967472
94	2·7126458	3·1363834	94	2·7011786	3·1246851	94	2·6895732	3·1128308
95	2·5353747	2·9426037	95	2·5239075	2·9309195	95	2·5123021	2·9190812
96	2·3475998	2·7385078	96	2·3361326	2·7268388	96	2·3245272	2·7150150
97	2·1488599	2·5235618	97	2·1373927	2·5119074	97	2·1257873	2·5000992
98	1·9386836	2·2971438	98	1·9272164	2·2855016	98	1·9156110	2·2737084
99	1·7165892	2·0584556	99	1·7051220	2·0468287	99	1·6935166	2·0350501
100	1·4820844	1·8063618	100	1·4706172	1·7947501	100	1·4590118	1·7829897
101	1·2346669	1·5389932	101	1·2231997	1·5273979	101	1·2115943	1·5156553
102	0·9738239	1·2528069	102	0·9623567	1·2412351	102	0·9507513	1·2295129
103	0·6990323	0·9400979	103	0·6875651	0·9285495	103	0·6759597	0·9168644
104	0·4097587	0·5809934	104	0·3982915	0·5694793	104	0·3866861	0·5578199
105	0·1054593		105	0·0939921		105	0·0823867	
106	9·7855801		106	9·7741129		106	9·7625075	
107	9·4495567		107	9·4380895		107	9·4264841	
108	9·0968144		108	9·0853472		108	9·0737418	
109	8·7267681		109	8·7153009		109	8·7036955	

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	39			40			41	
Age of (x)	$\lambda\ D_{x,\,39}$	$\lambda\ N_{x,\,39}$	Age of (x)	$\lambda\ D_{x,\,40}$	$\lambda\ N_{x,\,40}$	Age of (x)	$\lambda\ D_{x,\,41}$	$\lambda\ N_{x,\,41}$
0	5·8989094	6·9963450	0	5·8869946	6·9785820	0	5·8749069	6·9604162
1	5·8149072	6·9780436	1	5·8029924	6·9601785	1	5·7909047	6·9419039
2	5·7796263	6·9650351	2	5·7677115	6·9471401	2	5·7556238	6·9288328
3	5·7575130	6·9536318	3	5·7455982	6·9357299	3	5·7335105	6·9174143
4	5·7406113	6·9429616	4	5·7286965	6·9250643	4	5·7166088	6·9067523
5	5·7263839	6·9326998	5	5·7144691	6·9148146	5	5·7023814	6·8965139
6	5·7140227	6·9226848	6	5·7021079	6·9048170	6	5·6900202	6·8865331
7	5·7028792	6·9128045	7	5·6909644	6·8949573	7	5·6788767	6·8766940
8	5·6924650	6·9029829	8	5·6805502	6·8851600	8	5·6684625	6·8669201
9	5·6827176	6·8931739	9	5·6708028	6·8753774	9	5·6587151	6·8571639
10	5·6734824	6·8833328	10	5·6615676	6·8655643	10	5·6494799	6·8473789
11	5·6646179	6·8734222	11	5·6527031	6·8556835	11	5·6406154	6·8375273
12	5·6559959	6·8634116	12	5·6440811	6·8457040	12	5·6319934	6·8275786
13	5·6475014	6·8532772	13	5·6355866	6·8356017	13	5·6234989	6·8175084
14	5·6390325	6·8430010	14	5·6271177	6·8253587	14	5·6150300	6·8072979
15	5·6305007	6·8325707	15	5·6185859	6·8149622	15	5·6064982	6·7969351
16	5·6218304	6·8219782	16	5·6099156	6·8044049	16	5·5978279	6·7864123
17	5·6129596	6·8112206	17	5·6010448	6·7936834	17	5·5889571	6·7757266
18	5·6038391	6·8002978	18	5·5919243	6·7827984	18	5·5798366	6·7648784
19	5·5944333	6·7892136	19	5·5825185	6·7717535	19	5·5704308	6·7538720
20	5·5847195	6·7779741	20	5·5728047	6·7605551	20	5·5607170	6·7427140
21	5·5746883	6·7665871	21	5·5627735	6·7492113	21	5·5506858	6·7314129
22	5·5645767	6·7550609	22	5·5526619	6·7377312	22	5·5405742	6·7199778
23	5·5543874	6·7433889	23	5·5424726	6·7261078	23	5·5303849	6·7084022
24	5·5441222	6·7315631	24	5·5322074	6·7143332	24	5·5201197	6·6966784
25	5·5337821	6·7195743	25	5·5218673	6·7023993	25	5·5097796	6·6847978
26	5·5233672	6·7074133	26	5·5114524	6·6902958	26	5·4993647	6·6727514
27	5·5128768	6·6950696	27	5·5009620	6·6780128	27	5·4888743	6·6605284
28	5·5023093	6·6825318	28	5·4903945	6·6655390	28	5·4783068	6·6481180
29	5·4916625	6·6697879	29	5·4797477	6·6528622	29	5·4676600	6·6355081
30	5·4809331	6·6568244	30	5·4690183	6·6399696	30	5·4569306	6·6226856
31	5·4701171	6·6436273	31	5·4582023	6·6268469	31	5·4461146	6·6096369
32	5·4592096	6·6301826	32	5·4472948	6·6134792	32	5·4352071	6·5963467
33	5·4482049	6·6164739	33	5·4362901	6·5998514	33	5·4242024	6·5827996
34	5·4370965	6·6024849	34	5·4251817	6·5859465	34	5·4130940	6·5689792
35	5·4258770	6·5881976	35	5·4139622	6·5717469	35	5·4018745	6·5548675
36	5·4145382	6·5735947	36	5·4026234	6·5572339	36	5·3905357	6·5404462
37	5·4030710	6·5586556	37	5·3911562	6·5423888	37	5·3790685	6·5256948
38	5·3914656	6·5433606	38	5·3795508	6·5271898	38	5·3674631	6·5105941
39	5·3797112	6·5276884	39	5·3677964	6·5116163	39	5·3557087	6·4951213
40	5·3677964	6·5116163	40	5·3558816	6·4956456	40	5·3437939	6·4792536
41	5·3557087	6·4951213	41	5·3437939	6·4792536	41	5·3317062	6·4629675
42	5·3434349	6·4781781	42	5·3315201	6·4624157	42	5·3194324	6·4462373
43	5·3309609	6·4607605	43	5·3190461	6·4451051	43	5·3069584	6·4290368
44	5·3182720	6·4428420	44	5·3063572	6·4272939	44	5·2942695	6·4113377
45	5·3053523	6·4243926	45	5·2934375	6·4089538	45	5·2813498	6·3931096
46	5·2921853	6·4053815	46	5·2802705	6·3900526	46	5·2681828	6·3743225
47	5·2787536	6·3857765	47	5·2668388	6·3705572	47	5·2547511	6·3549418
48	5·2650390	6·3655413	48	5·2531242	6·3504326	48	5·2410365	6·3349320
49	5·2510224	6·3446400	49	5·2391076	6·3296401	49	5·2270199	6·3142549
50	5·2366840	6·3230300	50	5·2247692	6·3081404	50	5·2126815	6·2928690
51	5·2220030	6·3006685	51	5·2100882	6·2858871	51	5·1980005	6·2707308
52	5·2067133	6·2775075	52	5·1947985	6·2628330	52	5·1827108	6·2477897
53	5·1909788	6·2535164	53	5·1790640	6·2389484	53	5·1669763	6·2240169
54	5·1747822	6·2286463	54	5·1628674	6·2141826	54	5·1507797	6·1993624

JOINT LIVES :—TWO MALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (*y*)	39			40			41	
Age of (*x*)	$\lambda\ D_{x,\,39}$	$\lambda\ N_{x,\,39}$	**Age** of (*x*)	$\lambda\ D_{x,\,40}$	$\lambda\ N_{x,\,40}$	**Age** of (*x*)	$\lambda\ D_{x,\,41}$	$\lambda\ N_{x,\,41}$
55	5·1580963	6·2028413	55	5·1461815	6·1884810	55	5·1340938	6·1737700
56	5·1408834	6·1760411	56	5·1289686	6·1617823	56	5·1168809	6·1471790
57	5·1230954	6·1481805	57	5·1111806	6·1340202	57	5·0990929	6·1195224
58	5·1046739	6·1191856	58	5·0927591	6·1051227	58	5·0806714	6·0907277
59	5·0855503	6·0889790	59	5·0736355	6·0750109	59	5·0615478	6·0607175
60	5·0656455	6·0574767	60	5·0537307	6·0436008	60	5·0416430	6·0294061
61	5·0448702	6·0245875	61	5·0329554	6·0108018	61	5·0208677	5·9967030
62	5·0231247	5·9902158	62	5·0112099	5·9765163	62	4·9991222	5·9625115
63	5·0002990	5·9542570	63	4·9883842	5·9406428	63	4·9762965	5·9267278
64	4·9762728	5·9166011	64	4·9643580	5·9030688	64	4·9522703	5·8892416
65	4·9509154	5·8771308	65	4·9390006	5·8636775	65	4·9269129	5·8499352
66	4·9240858	5·8357215	66	4·9121710	5·8223443	66	4·9000833	5·8086836
67	4·8956327	5·7922402	67	4·8837179	5·7789367	67	4·8716302	5·7653549
68	4·8653946	5·7465470	68	4·8534798	5·7333143	68	4·8413921	5·7198085
69	4·8331993	5·6984937	69	4·8212845	5·6853286	69	4·8091968	5·6718960
70	4·7988647	5·6479234	70	4·7869499	5·6348234	70	4·7748622	5·6214607
71	4·7621981	5·5946707	71	4·7502833	5·5816331	71	4·7381956	5·5683375
72	4·7229965	5·5385612	72	4·7110817	5·5255835	72	4·6989940	5·5123521
73	4·6810168	5·4794114	73	4·6691320	5·4664908	73	4·6570443	5·4533210
74	4·6361252	5·4170283	74	4·6242104	5·4041624	74	4·6121227	5·3910513
75	4·5879979	5·3512096	75	4·5760831	5·3383953	75	4·5639954	5·3253405
76	4·5364205	5·2817418	76	4·5245057	5·2689777	76	4·5124180	5·2559757
77	4·4811386	5·2084035	77	4·4692238	5·1956857	77	4·4571361	5·1827355
78	4·4218872	5·1309600	78	4·4099724	5·1182882	78	4·3978847	5·1053851
79	4·3583911	5·0491692	79	4·3464763	5·0365395	79	4·3343886	5·0236836
80	4·2903647	4·9627759	80	4·2784499	4·9501866	80	4·2663622	4·9373739
81	4·2175121	4·8715158	81	4·2055973	4·8589647	81	4·1935096	4·8461929
82	4·1395270	4·7751107	82	4·1276122	4·7625968	82	4·1155245	4·7498646
83	4·0560931	4·6732753	83	4·0441783	4·6607953	83	4·0320906	4·6481003
84	3·9668833	4·5657094	84	3·9549685	4·5532624	84	3·9428808	4·5406025
85	3·8715605	4·4521036	85	3·8596457	4·4396873	85	3·8475580	4·4270609
86	3·7697771	4·3321356	86	3·7578623	4·3197490	86	3·7457746	4·3071538
87	3·6611753	4·2054726	87	3·6492605	4·1931132	87	3·6371728	4·1805484
88	3·5453869	4·0717690	88	3·5334721	4·0594361	88	3·5213844	4·0468989
89	3·4220335	3·9306684	89	3·4101187	3·9183602	89	3·3980310	3·9058498
90	3·2907260	3·7818013	90	3·2788112	3·7695161	90	3·2667235	3·7570306
91	3·1510655	3·6247852	91	3·1391507	3·6125222	91	3·1270630	3·6000609
92	3·0026424	3·4592236	92	2·9907276	3·4469824	92	2·9786399	3·4345437
93	2·8450369	3·2847075	93	2·8331221	3·2724863	93	2·8210344	3·2600695
94	2·6778188	3·1008084	94	2·6659040	3·0886059	94	2·6538163	3·0762096
95	2·5005477	2·9070758	95	2·4886329	2·8948913	95	2·4765452	2·8825143
96	2·3127728	2·7030264	96	2·3008580	2·6908594	96	2·2887703	2·6785011
97	2·1140329	2·4881261	97	2·1021181	2·4759761	97	2·0900304	2·4636362
98	1·9038566	2·2617516	98	1·8919418	2·2496197	98	1·8798541	2·2372983
99	1·6817622	2·0231105	99	1·6698474	2·0109959	99	1·6577597	1·9986939
100	1·4472574	1·7710661	100	1·4353426	1·7589717	100	1·4232549	1·7466895
101	1·1998399	1·5037553	101	1·1879251	1·4916796	101	1·1758374	1·4794227
102	0·9389969	1·2176365	102	0·9270821	1·2055914	102	0·9149944	1·1933584
103	0·6642053	0·9050129	103	0·6522905	0·8930012	103	0·6402028	0·8808079
104	0·3749317	0·5460242	104	0·3630169	0·5340388	104	0·3509292	0·5218961
105	0·0706323		105	0·0587175		105	0·0466298	
106	9·7507531		106	9·7388383		106	9·7267506	
107	9·4147297		107	9·4028149		107	9·3907272	
108	9·0619874		108	9·0500726		108	9·0379849	
109	8·6919411		109	8·6800263		109	8·6679386	

JOINT LIVES :—TWO MALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	42		43			44		
Age of (x)	$\lambda\ D_{x,\,42}$	$\lambda\ N_{x,\,42}$	**Age** of (x)	$\lambda\ D_{x,\,43}$	$\lambda\ N_{x,\,43}$	**Age** of (x)	$\lambda\ D_{x,\,44}$	$\lambda\ N_{x,\,44}$
0	5·8626331	6·9418262	0	5·8501591	6·9227893	0	5·8374702	6·9032813
1	5·7786309	6·9231983	1	5·7661569	6·9040387	1	5·7534680	6·8844002
2	5·7433500	6·9100917	2	5·7308760	6·8908934	2	5·7181871	6·8712130
3	5·7212367	6·8986630	3	5·7087627	6·8794529	3	5·6960738	6·8597589
4	5·7043350	6·8880038	4	5·6918610	6·8687949	4	5·6791721	6·8491013
5	5·6901076	6·8777757	5	5·6776336	6·8585768	5	5·6649447	6·8388918
6	5·6777464	6·8678110	6	5·6652724	6·8486277	6	5·6525835	6·8289581
7	5·6666029	6·8579924	7	5·6541289	6·8388289	7	5·6414400	6·8191787
8	5·6561887	6·8482419	8	5·6437147	6·8291016	8	5·6310258	6·8094740
9	5·6464413	6·8385113	9	5·6339673	6·8193966	9	5·6212784	6·7997947
10	5·6372061	6·8287544	10	5·6247321	6·8096671	10	5·6120432	6·7900929
11	5·6283416	6·8189323	11	5·6158676	6·7998745	11	5·6031787	6·7803288
12	5·6197196	6·8090138	12	5·6072456	6·7899864	12	5·5945567	6·7704712
13	5·6112251	6·7989749	13	5·5987511	6·7799785	13	5·5860622	6·7604943
14	5·6027562	6·7887971	14	5·5902822	6·7698325	14	5·5775933	6·7503797
15	5·5942244	6·7784674	15	5·5817504	6·7595360	15	5·5690615	6·7401153
16	5·5855541	6·7679787	16	5·5730801	6·7490807	16	5·5603912	6·7296934
17	5·5766833	6·7573279	17	5·5642093	6·7384643	17	5·5515204	6·7191110
18	5·5675628	6·7465161	18	5·5550888	6·7276880	18	5·5423999	6·7083697
19	5·5581570	6·7355475	19	5·5456830	6·7167567	19	5·5329941	6·6974744
20	5·5484432	6·7244290	20	5·5359692	6·7056769	20	5·5232803	6·6864328
21	5·5384120	6·7131695	21	5·5259380	6·6944583	21	5·5132491	6·6752541
22	5·5283004	6·7017789	22	5·5158264	6·6831109	22	5·5031375	6·6639492
23	5·5181111	6·6902502	23	5·5056371	6·6716284	23	5·4929482	6·6525118
24	5·5078459	6·6785762	24	5·4953719	6·6600033	24	5·4826830	6·6409346
25	5·4975058	6·6667486	25	5·4850318	6·6482275	25	5·4723429	6·6292098
26	5·4870909	6·6547578	26	5·4746169	6·6362920	26	5·4619280	6·6173283
27	5·4766005	6·6425944	27	5·4641265	6·6241866	27	5·4514376	6·6052805
28	5·4660330	6·6302464	28	5·4535590	6·6119009	28	5·4408701	6·5930553
29	5·4553862	6·6177027	29	5·4429122	6·5994222	29	5·4302233	6·5806417
30	5·4446568	6·6049501	30	5·4321828	6·5867387	30	5·4194939	6·5680260
31	5·4338408	6·5919746	31	5·4213668	6·5738361	31	5·4086779	6·5551955
32	5·4229333	6·5787618	32	5·4104593	6·5606998	32	5·3977704	6·5421354
33	5·4119286	6·5652957	33	5·3994546	6·5473144	33	5·3867657	6·5288298
34	5·4008202	6·5515596	34	5·3883462	6·5336628	34	5·3756573	6·5152628
35	5·3896007	6·5375362	35	5·3771267	6·5197276	35	5·3644378	6·5014156
36	5·3782619	6·5232065	36	5·3657879	6·5054902	36	5·3530990	6·4872705
37	5·3667947	6·5085511	37	5·3543207	6·4909307	37	5·3416318	6·4728073
38	5·3551893	6·4935486	38	5·3427153	6·4760282	38	5·3300264	6·4580052
39	5·3434349	6·4781781	39	5·3309609	6·4607605	39	5·3182720	6·4428420
40	5·3315201	6·4624157	40	5·3190461	6·4451051	40	5·3063572	6·4272939
41	5·3194324	6·4462373	41	5·3069584	6·4290368	41	5·2942695	6·4113377
42	5·3071586	6·4296178	42	5·2946846	6·4125299	42	5·2819957	6·3949457
43	5·2946846	6·4125299	43	5·2822106	6·3955579	43	5·2695217	6·3780914
44	5·2819957	6·3949457	44	5·2695217	6·3780914	44	5·2568328	6·3607461
45	5·2690760	6·3768348	45	5·2566020	6·3601007	45	5·2439131	6·3428785
46	5·2559090	6·3581651	46	5·2434350	6·3415534	46	5·2307461	6·3244567
47	5·2424773	6·3389038	47	5·2300033	6·3224147	47	5·2173144	6·3054462
48	5·2287627	6·3190138	48	5·2162887	6·3026495	48	5·2035998	6·2858091
49	5·2147461	6·2984568	49	5·2022721	6·2822178	49	5·1895832	6·2655077
50	5·2004077	6·2771912	50	5·1879337	6·2610778	50	5·1752448	6·2444985
51	5·1857267	6·2551719	51	5·1732527	6·2391841	51	5·1605638	6·2227363
52	5·1704370	6·2323510	52	5·1579630	6·2164873	52	5·1452741	6·2001705
53	5·1547025	6·2086960	53	5·1422285	6·1929581	53	5·1295396	6·1767712
54	5·1385059	6·1841584	54	5·1260319	6·1685435	54	5·1133430	6·1524880

JOINT LIVES:—Two Males.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	42			43			44	
Age of (x)	$\lambda D_{x,42}$	$\lambda N_{x,42}$	Age of (x)	$\lambda D_{x,43}$	$\lambda N_{x,43}$	Age of (x)	$\lambda D_{x,44}$	$\lambda N_{x,44}$
55	5·1218200	6·1586821	55	5·1093460	6·1431894	55	5·0966571	6·1272626
56	5·1046071	6·1322052	56	5·0921331	6·1168338	56	5·0794442	6·1010346
57	5·0868191	6·1046612	57	5·0743451	6·0894088	57	5·0616562	6·0737359
58	5·0683976	6·0759767	58	5·0559236	6·0608417	58	5·0432347	6·0452933
59	5·0492740	6·0460735	59	5·0368000	6·0310532	59	5·0241111	6·0156272
60	5·0293692	6·0148677	60	5·0168952	5·9999592	60	5·0042063	5·9846524
61	5·0085939	5·9822676	61	4·9961199	5·9674686	61	4·9834310	5·9522786
62	4·9868484	5·9481757	62	4·9743744	5·9334837	62	4·9616855	5·9184078
63	4·9640227	5·9124890	63	4·9515487	5·8979008	63	4·9388598	5·8829357
64	4·9399965	5·8750965	64	4·9275225	5·8606089	64	4·9148336	5·8457518
65	4·9146391	5·8358810	65	4·9021651	5·8214907	65	4·8894762	5·8067379
66	4·8878095	5·7947174	66	4·8753355	5·7804214	66	4·8626466	5·7657694
67	4·8593564	5·7514731	67	4·8468824	5·7372682	67	4·8341935	5·7227138
68	4·8291183	5·7060084	68	4·8166443	5·6918907	68	4·8039554	5·6774306
69	4·7969230	5·6581745	69	4·7844490	5·6441411	69	4·7717601	5·6297713
70	4·7625884	5·6078146	70	4·7501144	5·5938625	70	4·7374255	5·5795797
71	4·7259218	5·5547636	71	4·7134478	5·5408892	71	4·7007589	5·5266902
72	4·6867202	5·4988472	72	4·6742462	5·4850474	72	4·6615573	5·4709286
73	4·6447705	5·4398822	73	4·6322965	5·4261535	73	4·6196076	5·4121115
74	4·5998489	5·3776759	74	4·5873749	5·3640150	74	4·5746860	5·3500463
75	4·5517216	5·3120254	75	4·5392476	5·2984297	75	4·5265587	5·2845309
76	4·5001442	5·2427185	76	4·4876702	5·2291848	76	4·4749813	5·2153531
77	4·4448623	5·1695325	77	4·4323883	5·1560582	77	4·4196994	5·1422902
78	4·3856109	5·0922352	78	4·3731369	5·0788167	78	4·3604480	5·0651098
79	4·3221148	5·0105819	79	4·3096408	4·9972177	79	4·2969519	4·9835682
80	4·2540884	4·9243206	80	4·2416144	4·9110062	80	4·2289255	4·8974121
81	4·1812358	4·8331841	81	4·1687618	4·8199188	81	4·1560729	4·8063760
82	4·1032507	4·7368974	82	4·0907767	4·7236781	82	4·0780878	4·7101851
83	4·0198168	4·6351740	83	4·0073428	4·6219973	83	3·9946539	4·6085511
84	3·9306070	4·5277137	84	3·9181330	4·5145783	84	3·9054441	4·5011768
85	3·8352842	4·4142079	85	3·8228102	4·4011112	85	3·8101213	4·3877517
86	3·7335008	4·2943350	86	3·7210268	4·2812750	86	3·7083379	4·2679551
87	3·6248990	4·1677615	87	3·6124250	4·1547364	87	3·5997361	4·1414538
88	3·5091106	4·0341434	88	3·4966366	4·0211504	88	3·4839477	4·0079039
89	3·3857572	3·8931218	89	3·3732832	3·8801611	89	3·3605943	3·8669474
90	3·2544497	3·7443305	90	3·2419757	3·7313977	90	3·2292868	3·7182168
91	3·1147892	3·5873854	91	3·1023152	3·5744815	91	3·0896263	3·5613292
92	2·9663661	3·4218930	92	2·9538921	3·4090145	92	2·9412032	3·3958915
93	2·8087606	3·2474420	93	2·7962866	3·2345881	93	2·7835977	3·2214915
94	2·6415425	3·0636046	94	2·6290685	3·0507748	94	2·6163796	3·0377033
95	2·4642714	2·8699302	95	2·4517974	2·8571237	95	2·4391085	2·8440769
96	2·2764965	2·6659373	96	2·2640225	2·6531517	96	2·2513336	2·6401305
97	2·0777566	2·4510922	97	2·0652826	2·4383287	97	2·0525937	2·4253287
98	1·8675803	2·2247742	98	1·8551063	2·2120312	98	1·8424174	2·1990549
99	1·6454859	1·9861898	99	1·6330119	1·9734691	99	1·6203230	1·9605155
100	1·4109811	1·7342084	100	1·3985071	1·7215105	100	1·3858182	1·7085832
101	1·1635636	1·4669654	101	1·1510896	1·4542959	101	1·1384007	1·4413950
102	0·9027206	1·1809340	102	0·8902466	1·1682942	102	0·8775577	1·1554301
103	0·6279290	0·8684152	103	0·6154550	0·8558219	103	0·6027661	0·8429959
104	0·3386554	0·5095654	104	0·3261814	0·4970126	104	0·3134925	0·4842571
105	0·0343560		105	0·0218820		105	0·0091931	
106	9·7144768		106	9·7020028		106	9·6893139	
107	9·3784534		107	9·3659794		107	9·3532905	
108	9·0257111		108	9·0132371		108	9·0005482	
109	8·6556648		109	8·6431908		109	8·6305019	

ENGLISH LIFE TABLE, No. 3.

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	45		46			47		
Age of (x)	$\lambda\, D_{x,\,45}$	$\lambda\, N_{x,\,45}$	Age of (x)	$\lambda\, D_{x,\,46}$	$\lambda\, N_{x,\,46}$	Age of (x)	$\lambda\, D_{x,\,47}$	$\lambda\, N_{x,\,47}$
0	5·8245505	6·8832767	0	5·8113835	6·8627477	0	5·7979518	6·8416641
1	5·7405483	6·8642566	1	5·7273813	6·8435800	1	5·7139496	6·8223397
2	5·7052674	6·8510243	2	5·6921004	6·8302985	2	5·6786687	6·8090053
3	5·6831541	6·8395545	3	5·6699871	6·8188110	3	5·6565554	6·7974978
4	5·6662524	6·8288957	4	5·6530854	6·8081500	4	5·6396537	6·7868332
5	5·6520250	6·8186946	5	5·6388580	6·7979559	5	5·6254263	6·7766452
6	5·6396638	6·8087751	6	5·6264968	6·7880504	6	5·6130651	6·7667530
7	5·6285203	6·7990150	7	5·6153533	6·7783090	7	5·6019216	6·7570300
8	5·6181061	6·7893329	8	5·6049391	6·7686493	8	5·5915074	6·7473921
9	5·6083587	6·7796787	9	5·5951917	6·7590202	9	5·5817600	6·7377880
10	5·5991235	6·7700043	10	5·5859565	6·7493727	10	5·5725248	6·7281676
11	5·5902590	6·7602692	11	5·5770920	6·7396665	11	5·5636603	6·7184898
12	5·5816370	6·7504411	12	5·5684700	6·7298683	12	5·5550383	6·7087216
13	5·5731425	6·7404952	13	5·5599755	6·7199527	13	5·5465438	6·6988363
14	5·5646736	6·7304123	14	5·5515066	6·7099011	14	5·5380749	6·6888153
15	5·5561418	6·7201795	15	5·5429748	6·6997001	15	5·5295431	6·6786458
16	5·5474715	6·7097901	16	5·5343045	6·6893424	16	5·5208728	6·6683200
17	5·5386007	6·6992413	17	5·5254337	6·6788262	17	5·5120020	6·6578357
18	5·5294802	6·6885341	18	5·5163132	6·6681532	18	5·5028815	6·6471953
19	5·5200744	6·6776743	19	5·5069074	6·6573279	19	5·4934757	6·6364047
20	5·5103606	6·6666698	20	5·4971936	6·6463597	20	5·4837619	6·6254716
21	5·5003294	6·6555304	21	5·4871624	6·6352585	21	5·4737307	6·6144079
22	5·4902178	6·6442669	22	5·4770508	6·6240357	22	5·4636191	6·6032248
23	5·4800285	6·6328737	23	5·4668615	6·6126855	23	5·4534298	6·5919170
24	5·4697633	6·6213435	24	5·4565963	6·6012014	24	5·4431646	6·5804775
25	5·4594232	6·6096686	25	5·4462562	6·5895754	25	5·4328245	6·5688993
26	5·4490083	6·5978402	26	5·4358413	6·5777992	26	5·4224096	6·5571739
27	5·4385179	6·5858488	27	5·4253509	6·5658629	27	5·4119192	6·5452920
28	5·4279504	6·5736835	28	5·4147834	6·5537566	28	5·4013517	6·5332432
29	5·4173036	6·5613332	29	5·4041366	6·5414686	29	5·3907049	6·5210165
30	5·4065742	6·5487854	30	5·3934072	6·5289866	30	5·3799755	6·5085997
31	5·3957582	6·5360258	31	5·3825912	6·5162978	31	5·3691595	6·4959798
32	5·3848507	6·5230408	32	5·3716837	6·5033870	32	5·3582520	6·4831428
33	5·3738460	6·5098148	33	5·3606790	6·4902395	33	5·3472473	6·4700726
34	5·3627376	6·4963310	34	5·3495706	6·4768387	34	5·3361389	6·4567539
35	5·3515181	6·4825722	35	5·3383511	6·4631669	35	5·3249194	6·4431688
36	5·3401793	6·4685190	36	5·3270123	6·4492060	36	5·3135806	6·4292987
37	5·3287121	6·4541524	37	5·3155451	6·4349352	37	5·3021134	6·4151245
38	5·3171067	6·4394508	38	5·3039397	6·4203348	38	5·2905080	6·4006240
39	5·3053523	6·4243926	39	5·2921853	6·4053815	39	5·2787536	6·3857765
40	5·2934375	6·4089538	40	5·2802705	6·3900526	40	5·2668388	6·3705572
41	5·2813498	6·3931096	41	5·2681828	6·3743225	41	5·2547511	6·3549418
42	5·2690760	6·3768348	42	5·2559090	6·3581651	42	5·2424773	6·3389038
43	5·2566020	6·3601007	43	5·2434350	6·3415534	43	5·2300033	6·3224147
44	5·2439131	6·3428785	44	5·2307461	6·3244567	44	5·2173144	6·3054462
45	5·2309934	6·3251377	45	5·2178264	6·3068445	45	5·2043947	6·2879653
46	5·2178264	6·3068445	46	5·2046594	6·2886842	46	5·1912277	6·2699393
47	5·2043947	6·2879653	47	5·1912277	6·2699393	47	5·1777960	6·2513333
48	5·1906801	6·2684622	48	5·1775131	6·2505737	48	5·1640814	6·2321081
49	5·1766635	6·2482949	49	5·1634965	6·2305463	49	5·1500648	6·2122243
50	5·1623251	6·2274218	50	5·1491581	6·2098133	50	5·1357264	6·1916379
51	5·1476441	6·2057961	51	5·1344771	6·1883299	51	5·1210454	6·1703008
52	5·1323544	6·1833678	52	5·1191874	6·1660442	52	5·1057557	6·1481638
53	5·1166199	6·1601055	53	5·1034529	6·1429255	53	5·0900212	6·1251943
54	5·1004233	6·1359581	54	5·0872563	6·1189215	54	5·0738246	6·1013404

JOINT LIVES:—TWO MALES.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	45		46			47		
Age of (x)	$\lambda\ D_{x,45}$	$\lambda\ N_{x,45}$	Age of (x)	$\lambda\ D_{x,46}$	$\lambda\ N_{x,46}$	Age of (x)	$\lambda\ D_{x,47}$	$\lambda\ N_{x,47}$
55	5·0837374	6·1108701	55	5·0705704	6·0939754	55	5·0571387	6·0765439
56	5·0665245	6·0847764	56	5·0533575	6·0680251	56	5·0399258	6·0507424
57	5·0487365	6·0576110	57	5·0355695	6·0410005	57	5·0221378	6·0238670
58	5·0303150	6·0293001	58	5·0171480	6·0128284	58	5·0037163	5·9958422
59	5·0111914	5·9997637	59	4·9980244	5·9834296	59	4·9845927	5·9665885
60	4·9912866	5·9689166	60	4·9781196	5·9527177	60	4·9646879	5·9360199
61	4·9705113	5·9366672	61	4·9573443	5·9206009	61	4·9439126	5·9040439
62	4·9487658	5·9029177	62	4·9355988	5·8869811	62	4·9221671	5·8705621
63	4·9259401	5·8675644	63	4·9127731	5·8517538	63	4·8993414	5·8354697
64	4·9019139	5·8304955	64	4·8887469	5·8148084	64	4·8753152	5·7986553
65	4·8765565	5·7915935	65	4·8633895	5·7760260	65	4·8499578	5·7600011
66	4·8497269	5·7507333	66	4·8365599	5·7352817	66	4·8231282	5·7193809
67	4·8212738	5·7077822	67	4·8081068	5·6924428	67	4·7946751	5·6766622
68	4·7910357	5·6626000	68	4·7778687	5·6473689	68	4·7644370	5·6317044
69	4·7588404	5·6150383	69	4·7456734	5·5999115	69	4·7322417	5·5843591
70	4·7245058	5·5649399	70	4·7113388	5·5499141	70	4·6979071	5·5344695
71	4·6878392	5·5121403	71	4·6746722	5·4972107	71	4·6612405	5·4818705
72	4·6486376	5·4564650	72	4·6354706	5·4416284	72	4·6220389	5·4263875
73	4·6066879	5·3977308	73	4·5935209	5·3829832	73	4·5800892	5·3678381
74	4·5617663	5·3357446	74	4·5485993	5·3210827	74	4·5351676	5·3060292
75	4·5136390	5·2703047	75	4·5004720	5·2557240	75	4·4870403	5·2407589
76	4·4620616	5·2011988	76	4·4488946	5·1866959	76	4·4354629	5·1718142
77	4·4067797	5·1282050	77	4·3936127	5·1137760	77	4·3801810	5·0989745
78	4·3475283	5·0510900	78	4·3343613	5·0367319	78	4·3209296	5·0220066
79	4·2840322	4·9696111	79	4·2708652	4·9553202	79	4·2574335	4·9406679
80	4·2160058	4·8835138	80	4·2028388	4·8692880	80	4·1894071	4·8547043
81	4·1431532	4·7925346	81	4·1299862	4·7783690	81	4·1165545	4·7638524
82	4·0651681	4·6963966	82	4·0520011	4·6822895	82	4·0385694	4·6678348
83	3·9817342	4·5948140	83	3·9685672	4·5807613	83	3·9551355	4·5663664
84	3·8925244	4·4874876	84	3·8793574	4·4734873	84	3·8659257	4·4591487
85	3·7972016	4·3741083	85	3·7840346	4·3601572	85	3·7706029	4·3458726
86	3·6954182	4·2543545	86	3·6822512	4·2404507	86	3·6688195	4·2262167
87	3·5868164	4·1278942	87	3·5736494	4·1140343	87	3·5602177	4·0998487
88	3·4710280	3·9943822	88	3·4578610	3·9805642	88	3·4444293	3·9664242
89	3·3476746	3·8534627	89	3·3345076	3·8396841	89	3·3210759	3·8255871
90	3·2163671	3·7047663	90	3·2032001	3·6910249	90	3·1897684	3·6769687
91	3·0767066	3·5479112	91	3·0635396	3·5342064	91	3·0501079	3·5201887
92	2·9282835	3·3825040	92	2·9151165	3·3688315	92	2·9016848	3·3548509
93	2·7706780	3·2081338	93	2·7575110	3·1944929	93	2·7440793	3·1805465
94	2·6034599	3·0243723	94	2·5902929	3·0107629	94	2·5768612	2·9968495
95	2·4261888	2·8307721	95	2·4130218	2·8171904	95	2·3995901	2·8033096
96	2·2384139	2·6268514	96	2·2252469	2·6132962	96	2·2118152	2·5994453
97	2·0396740	2·4120774	97	2·0265070	2·3985493	97	2·0130753	2·3847261
98	1·8294977	2·1858263	98	1·8163307	2·1723271	98	1·8028990	2·1585350
99	1·6074033	1·9473137	99	1·5942363	1·9338425	99	1·5808046	1·9200816
100	1·3728985	1·6954073	100	1·3597315	1·6819672	100	1·3462998	1·6682396
101	1·1254810	1·4282514	101	1·1123140	1·4148430	101	1·0988823	1·4011558
102	0·8646380	1·1423206	102	0·8514710	1·1289547	102	0·8380393	1·1153076
103	0·5898464	0·8299403	103	0·5766794	0·8166191	103	0·5632477	0·8030267
104	0·3005728	0·4712477	104	0·2874058	0·4580029	104	0·2739741	0·4444820
105	9·9962734		105	9·9831064		105	9·9696747	
106	9·6763942		106	9·6632272		106	9·6497955	
107	9·3403708		107	9·3272038		107	9·3137721	
108	8·9876285		108	8·9744615		108	8·9610298	
109	8·6175822		109	8·6044152		109	8·5909835	

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	48			49			50	
Age of (x)	λ $D_{x,\,48}$	λ $N_{x,\,48}$	Age of (x)	λ $D_{x,\,49}$	λ $N_{x,\,49}$	Age of (x)	λ $D_{x,\,50}$	λ $N_{x,\,50}$
0	5·7842372	6·8199946	0	5·7702206	6·7977038	0	5·7558822	6·7747538
1	5·7002350	6·8005026	1	5·6862184	6·7780343	1	5·6718800	6·7548954
2	5·6649541	6·7871116	2	5·6509375	6·7645813	2	5·6365991	6·7413763
3	5·6428408	6·7755818	3	5·6288242	6·7530270	3	5·6144858	6·7297941
4	5·6259391	6·7649116	4	5·6119225	6·7423501	4	5·5975841	6·7191090
5	5·6117117	6·7547292	5	5·5976951	6·7321716	5	5·5833567	6·7089338
6	5·5993505	6·7448496	6	5·5853339	6·7223043	6	5·5709955	6·6990775
7	5·5882070	6·7351444	7	5·5741904	6·7126165	7	5·5598520	6·6894070
8	5·5777928	6·7255285	8	5·5637762	6·7030220	8	5·5494378	6·6798338
9	5·5680454	6·7159489	9	5·5540288	6·6934671	9	5·5396904	6·6703032
10	5·5588102	6·7063556	10	5·5447936	6·6839005	10	5·5304552	6·6607637
11	5·5499457	6·6967063	11	5·5359291	6·6742797	11	5·5215907	6·6511710
12	5·5413237	6·6869673	12	5·5273071	6·6645703	12	5·5129687	6·6414909
13	5·5328292	6·6771126	13	5·5188126	6·6547453	13	5·5044742	6·6316961
14	5·5243603	6·6671222	14	5·5103437	6·6447856	14	5·4960053	6·6217663
15	5·5158285	6·6569833	15	5·5018119	6·6346776	15	5·4874735	6·6116888
16	5·5071582	6·6466891	16	5·4931416	6·6244137	16	5·4788032	6·6014557
17	5·4982874	6·6362366	17	5·4842708	6·6139928	17	5·4699324	6·5910649
18	5·4891669	6·6256283	18	5·4751503	6·6034163	18	5·4608119	6·5805200
19	5·4797611	6·6148708	19	5·4657445	6·5926910	19	5·4514061	6·5698267
20	5·4700473	6·6039730	20	5·4560307	6·5818268	20	5·4416923	6·5589952
21	5·4600161	6·5929453	21	5·4459995	6·5708353	21	5·4316611	6·5480380
22	5·4499045	6·5818010	22	5·4358879	6·5597284	22	5·4215495	6·5369687
23	5·4397152	6·5705343	23	5·4256986	6·5485021	23	5·4113602	6·5257810
24	5·4294500	6·5591390	24	5·4154334	6·5371494	24	5·4010950	6·5144702
25	5·4191099	6·5476072	25	5·4050933	6·5256635	25	5·3907549	6·5030287
26	5·4086950	6·5359315	26	5·3946784	6·5140363	26	5·3803400	6·4914491
27	5·3982046	6·5241027	27	5·3841880	6·5022591	27	5·3698496	6·4797224
28	5·3876371	6·5121105	28	5·3736205	6·4903223	28	5·3592821	6·4678392
29	5·3769903	6·4999437	29	5·3629737	6·4782145	29	5·3486353	6·4557892
30	5·3662609	6·4875909	30	5·3522443	6·4659241	30	5·3379059	6·4435602
31	5·3554449	6·4750389	31	5·3414283	6·4534388	31	5·3270899	6·4311400
32	5·3445374	6·4622737	32	5·3305208	6·4407444	32	5·3161824	6·4185153
33	5·3335327	6·4492805	33	5·3195161	6·4278262	33	5·3051777	6·4056707
34	5·3224243	6·4360426	34	5·3084077	6·4146686	34	5·2940693	6·3925913
35	5·3112048	6·4225430	35	5·2971882	6·4012533	35	5·2828498	6·3792599
36	5·2998660	6·4087636	36	5·2858494	6·3875632	36	5·2715110	6·3656577
37	5·2883988	6·3946842	37	5·2743822	6·3735783	37	5·2600438	6·3517662
38	5·2767934	6·3802845	38	5·2627768	6·3592778	38	5·2484384	6·3375643
39	5·2650390	6·3655413	39	5·2510224	6·3446400	39	5·2366840	6·3230300
40	5·2531242	6·3504326	40	5·2391076	6·3296401	40	5·2247692	6·3081404
41	5·2410365	6·3349320	41	5·2270199	6·3142549	41	5·2126815	6·2928690
42	5·2287627	6·3190138	42	5·2147461	6·2984568	42	5·2004077	6·2771912
43	5·2162887	6·3026495	43	5·2022721	6·2822178	43	5·1879337	6·2610778
44	5·2035998	6·2858091	44	5·1895832	6·2655077	44	5·1752448	6·2444985
45	5·1906801	6·2684622	45	5·1766635	6·2482949	45	5·1623251	6·2274218
46	5·1775131	6·2505737	46	5·1634965	6·2305463	46	5·1491581	6·2098133
47	5·1640814	6·2321081	47	5·1500648	6·2122243	47	5·1357204	6·1916379
48	5·1503668	6·2130280	48	5·1363502	6·1932910	48	5·1220118	6·1728548
49	5·1363502	6·1932910	49	5·1223336	6·1737060	49	5·1079952	6·1534231
50	5·1220118	6·1728548	50	5·1079952	6·1534231	50	5·0936568	6·1332988
51	5·1073308	6·1516707	51	5·0933142	6·1323958	51	5·0789758	6·1124317
52	5·0920411	6·1296867	52	5·0780245	6·1105715	52	5·0636861	6·0907714
53	5·0763066	6·1068725	53	5·0622900	6·0879176	53	5·0479516	6·0682843
54	5·0601100	6·0831746	54	5·0460934	6·0643824	54	5·0317550	6·0449167

JOINT LIVES:—Two Males.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	48			49			50	
Age of (x)	$\lambda D_{x,48}$	$\lambda N_{x,48}$	Age of (x)	$\lambda D_{x,49}$	$\lambda N_{x,49}$	Age of (x)	$\lambda D_{x,50}$	$\lambda N_{x,50}$
55	5·0434241	6·0585353	55	5·0294075	6·0399060	55	5·0150691	6·0206103
56	5·0262112	6·0328902	56	5·0121946	6·0144247	56	4·9978562	5·9952995
57	5·0084232	6·0061703	57	4·9944066	5·9878685	57	4·9800682	5·9689143
58	4·9900017	5·9783009	58	4·9759851	5·9601619	58	4·9616467	5·9413784
59	4·9708781	5·9492010	59	4·9568615	5·9312237	59	4·9425231	5·9126101
60	4·9509733	5·9187838	60	4·9369567	5·9009667	60	4·9226183	5·8825218
61	4·9301980	5·8869569	61	4·9161814	5·8692979	61	4·9018430	5·8510198
62	4·9084525	5·8536217	62	4·8944359	5·8361180	62	4·8800975	5·8180043
63	4·8856268	5·8186730	63	4·8716102	5·8013217	63	4·8572718	5·7833695
64	4·8616006	5·7819989	64	4·8475840	5·7647967	64	4·8332456	5·7470030
65	4·8362432	5·7434807	65	4·8222266	5·7264242	65	4·8078882	5·7087854
66	4·8094136	5·7029935	66	4·7953970	5·6860780	66	4·7810586	5·6685903
67	4·7809605	5·6604034	67	4·7669439	5·6436258	67	4·7526055	5·6262841
68	4·7507224	5·6155702	68	4·7367058	5·5989257	68	4·7223674	5·5817266
69	4·7185271	5·5683449	69	4·7045105	5·5518293	69	4·6901721	5·5347680
70	4·6841925	5·5185712	70	4·6701759	5·5021797	70	4·6558375	5·4852515
71	4·6475259	5·4660837	71	4·6335093	5·4498118	71	4·6191709	5·4330116
72	4·6083243	5·4107083	72	4·5943077	5·3945515	72	4·5799693	5·3778746
73	4·5663746	5·3522612	73	4·5523580	5·3362155	73	4·5380196	5·3196571
74	4·5214530	5·2905512	74	4·5071364	5·2746106	74	4·4930980	5·2581666
75	4·4733257	5·2253752	75	4·4593091	5·2095364	75	4·4449707	5·1932004
76	4·4217483	5·1565216	76	4·4077317	5·1407798	76	4·3933933	5·1245482
77	4·3664664	5·0837673	77	4·3524198	5·0681194	77	4·3381114	5·0519871
78	4·3072150	5·0068822	78	4·2931984	4·9913218	78	4·2788600	4·9752676
79	4·2437189	4·9256220	79	4·2297023	4·9101461	79	4·2153639	4·8941797
80	4·1756925	4·8397332	80	4·1616759	4·8243380	80	4·1473375	4·8084784
81	4·1028399	4·7489520	81	4·0888233	4·7336337	81	4·0744849	4·7178560
82	4·0248548	4·6530030	82	4·0108382	4·6377578	82	3·9964598	4·6220585
83	3·9414209	4·5515988	83	3·9274043	4·5364229	83	3·9130659	4·5207985
84	3·8522111	4·4444422	84	3·8381945	4·4293326	84	3·8238561	4·4137793
85	3·7568883	4·3312240	85	3·7428717	4·3161772	85	3·7285333	4·3006913
86	3·6551049	4·2116235	86	3·6410883	4·1966360	86	3·6267499	4·1812142
87	3·5465031	4·0853081	87	3·5324865	4·0703774	87	3·5181481	4·0550162
88	3·4307147	3·9519332	88	3·4166981	3·9370568	88	3·4023597	3·9217536
89	3·3073613	3·8111432	89	3·2933447	3·7963176	89	3·2790063	3·7810700
90	3·1760538	3·6625690	90	3·1620372	3·6477926	90	3·1476988	3·6325970
91	3·0363933	3·5058307	91	3·0223767	3·4910996	91	3·0080383	3·4759544
92	2·8879702	3·3405336	92	2·8739536	3·3258464	92	2·8596152	3·3107483
93	2·7303647	3·1662676	93	2·7163481	3·1516220	93	2·7020097	3·1365689
94	2·5631466	2·9826059	94	2·5491300	2·9680008	94	2·5347916	2·9529909
95	2·3858755	2·7891010	95	2·3718589	2·7745331	95	2·3575205	2·7595659
96	2·1981006	2·5852712	96	2·1840840	2·5707402	96	2·1697456	2·5558124
97	1·9993607	2·3705853	97	1·9853441	2·3560915	97	1·9710057	2·3412028
98	1·7891844	2·1444250	98	1·7751678	2·1299672	98	1·7608294	2·1151197
99	1·5670900	1·9060057	99	1·5530734	1·8915838	99	1·5387350	1·8767771
100	1·3325852	1·6542016	100	1·3185686	1·6398201	100	1·3042302	1·6250551
101	1·0851677	1·3871584	101	1·0711511	1·3728255	101	1·0568127	1·3581119
102	0·8243247	1·1013656	102	0·8103081	1·0870854	102	0·7959697	1·0724374
103	0·5495331	0·7891434	103	0·5355165	0·7749401	103	0·5211781	0·7603697
104	0·2602595	0·4306716	104	0·2462429	0·4165573	104	0·2319045	0·4020894
105	9·9559601		105	9·9419435		105	9·9276051	
106	9·6360809		106	9·6220643		106	9·6077259	
107	9·3000575		107	9·2860409		107	9·2717025	
108	8·9473152		108	8·9332986		108	8·9189602	
109	8·5772689		109	8·5632523		109	8·5489139	

JOINT LIVES :—TWO MALES.

Logarithms of the Series $D_{x, y}$ and $N_{x, y}$.

Age of (y)	51		52			53		
Age of (x)	λ $D_{x, 51}$	λ $N_{x, 51}$	Age of (x)	λ $D_{x, 52}$	λ $N_{x, 52}$	Age of (x)	λ $D_{x, 53}$	λ $N_{x, 53}$
0	5·7412012	6·7511029	0	5·7259115	6·7267019	0	5·7101770	6·7015258
1	5·6571990	6·7310433	1	5·6419093	6·7064317	1	5·6261748	6·6810320
2	5·6219181	6·7174537	2	5·6066284	6·6927662	2	5·5908939	6·6672856
3	5·5998048	6·7058415	3	5·5845151	6·6811218	3	5·5687806	6·6556047
4	5·5829031	6·6951456	4	5·5676134	6·6704140	4	5·5518789	6·6448832
5	5·5686757	6·6849728	5	5·5533860	6·6602415	5	5·5376515	6·6347103
6	5·5563145	6·6751272	6	5·5410248	6·6504063	6	5·5252903	6·6248835
7	5·5451710	6·6654731	7	5·5298813	6·6407684	7	5·5141468	6·6152618
8	5·5347568	6·6559210	8	5·5194671	6·6312367	8	5·5037326	6·6057507
9	5·5250094	6·6464150	9	5·5097197	6·6217552	9	5·4939852	6·5962930
10	5·5157742	6·6369018	10	5·5004845	6·6122689	10	5·4847500	6·5868338
11	5·5069097	6·6273378	11	5·4916200	6·6027330	11	5·4758855	6·5773264
12	5·4982877	6·6176869	12	5·4829980	6·5931118	12	5·4672635	6·5677343
13	5·4897932	6·6079221	13	5·4745035	6·5833764	13	5·4587690	6·5580290
14	5·4813243	6·5980225	14	5·4660346	6·5735069	14	5·4503001	6·5481891
15	5·4727925	6·5879747	15	5·4575028	6·5634892	15	5·4417683	6·5382012
16	5·4641222	6·5777718	16	5·4488325	6·5533156	16	5·4330980	6·5280573
17	5·4552514	6·5674116	17	5·4399617	6·5429852	17	5·4242272	6·5177557
18	5·4461309	6·5568966	18	5·4308412	6·5325005	18	5·4151067	6·5073005
19	5·4367251	6·5462348	19	5·4214354	6·5218686	19	5·4057009	6·4966989
20	5·4270113	6·5354357	20	5·4117216	6·5111012	20	5·3959871	6·4859613
21	5·4169801	6·5245120	21	5·4016904	6·5002104	21	5·3859559	6·4751031
22	5·4068685	6·5134781	22	5·3915788	6·4892112	22	5·3758443	6·4641380
23	5·3966792	6·5023294	23	5·3813895	6·4780991	23	5·3656550	6·4530619
24	5·3864140	6·4910587	24	5·3711243	6·4668689	24	5·3553898	6·4418697
25	5·3760739	6·4796607	25	5·3607842	6·4555127	25	5·3450497	6·4305553
26	5·3656590	6·4681272	26	5·3503693	6·4440244	26	5·3346348	6·4191103
27	5·3551686	6·4564501	27	5·3398789	6·4323950	27	5·3241444	6·4075279
28	5·3446011	6·4446193	28	5·3293114	6·4206160	28	5·3135769	6·3957987
29	5·3339543	6·4326252	29	5·3186646	6·4086764	29	5·3029301	6·3839130
30	5·3232249	6·4204566	30	5·3079352	6·3965659	30	5·2922007	6·3718592
31	5·3124089	6·4081001	31	5·2971192	6·3842723	31	5·2813847	6·3596262
32	5·3015014	6·3955433	32	5·2862117	6·3717819	32	5·2704772	6·3472012
33	5·2904967	6·3827714	33	5·2752070	6·3590808	33	5·2594725	6·3345696
34	5·2793883	6·3697688	34	5·2640986	6·3461538	34	5·2483641	6·3217163
35	5·2681688	6·3565190	35	5·2528791	6·3329841	35	5·2371146	6·3086254
36	5·2568300	6·3430043	36	5·2415103	6·3195545	36	5·2258058	6·2952793
37	5·2453628	6·3292044	37	5·2300731	6·3058458	37	5·2143386	6·2816597
38	5·2337574	6·3151001	38	5·2184677	6·2918371	38	5·2027332	6·2677461
39	5·2220030	6·3006685	39	5·2067133	6·2775075	39	5·1909788	6·2535164
40	5·2100882	6·2858871	40	5·1947985	6·2628330	40	5·1790640	6·2389484
41	5·1980005	6·2707308	41	5·1827108	6·2477897	41	5·1669703	6·2240169
42	5·1857267	6·2551719	42	5·1704370	6·2323510	42	5·1547025	6·2086960
43	5·1732527	6·2391841	43	5·1579630	6·2164873	43	5·1422285	6·1929581
44	5·1605638	6·2227363	44	5·1452741	6·2001705	44	5·1295396	6·1767712
45	5·1476441	6·2057961	45	5·1323544	6·1833678	45	5·1166199	6·1601055
46	5·1344771	6·1883299	46	5·1191874	6·1660442	46	5·1034529	6·1429255
47	5·1210454	6·1703008	47	5·1057557	6·1481638	47	5·0900212	6·1251943
48	5·1073308	6·1516707	48	5·0920411	6·1296867	48	5·0763066	6·1068725
49	5·0933142	6·1323958	49	5·0780245	6·1105715	49	5·0622900	6·0879176
50	5·0789758	6·1124317	50	5·0636861	6·0907714	50	5·0479516	6 0682843
51	5·0642948	6·0917307	51	5·0490051	6·0702374	51	5·0332706	6·0479217
52	5·0490051	6·0702374	52	5·0337154	6·0489174	52	5·0179809	6·0267762
53	5·0332706	6·0479217	53	5·0179809	6·0267762	53	5·0022464	6·0048165
54	5·0170740	6·0247282	54	5·0017843	6·0037620	54	4·9860198	5·9819853

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x, y}$ and $N_{x, y}$.

Age of (y)	51			52			53	
Age of (x)	λ $D_{x, 51}$	λ $N_{x, 51}$	Age of (x)	λ $D_{x, 52}$	λ $N_{x, 52}$	Age of (x)	λ $D_{x, 53}$	λ $N_{x, 53}$
55	5·0003881	6·0005972	55	4·9850984	5·9798126	55	4·9693639	5·9582234
56	4·9831752	5·9754638	56	4·9678855	5·9548629	56	4·9521510	5·9334638
57	4·9653872	5·9492569	57	4·9500975	5·9288410	57	4·9343630	5·9076341
58	4·9469057	5·9218997	58	4·9316760	5·9016697	58	4·9159415	5·8806562
59	4·9278121	5·8933094	59	4·9125524	5·8732656	59	4·8968179	5·8524465
60	4·9079373	5·8633981	60	4·8926476	5·8435398	60	4·8769131	5·8229152
61	4·8871620	5·8320717	61	4·8718723	5·8123977	61	4·8561378	5·7919667
62	4·8654165	5·7992299	62	4·8501268	5·7797384	62	4·8343923	5·7594996
63	4·8425908	5·7647661	63	4·8273011	5·7454549	63	4·8115666	5·7254064
64	4·8185646	5·7285671	64	4·8032749	5·7094334	64	4·7875404	5·6895728
65	4·7932072	5·6905138	65	4·7779175	5·6715538	65	4·7621830	5·6518780
66	4·7663776	5·6504793	66	4·7510879	5·6316894	66	4·7353534	5·6121945
67	4·7379245	5·6083294	67	4·7226348	5·5897056	67	4·7069003	5·5703876
68	4·7076864	5·5639231	68	4·6923967	5·5454608	68	4·6766622	5·5263152
69	4·6754911	5·5171118	69	4·6602014	5·4988053	69	4·6444669	5·4798276
70	4·6411565	5·4677375	70	4·6258668	5·4495827	70	4·6101323	5·4307668
71	4·6044899	5·4156348	71	4·5892002	5·3976262	71	4·5734657	5·3789676
72	4·5652883	5·3606294	72	4·5499986	5·3427619	72	4·5342641	5·3242547
73	4·5233386	5·3025386	73	4·5080489	5·2848060	73	4·4923144	5·2664451
74	4·4784170	5·2411698	74	4·4631273	5·2235668	74	4·4473928	5·2053454
75	4·4302897	5·1763208	75	4·4150000	5·1588424	75	4·3992655	5·1407550
76	4·3787123	5·1077793	76	4·3631226	5·0904203	76	4·3476881	5·0724617
77	4·3234304	5·0353252	77	4·3081107	5·0180786	77	4·2924062	5·0002435
78	4·2641790	4·9587249	78	4·2488893	4·9415875	78	4·2331548	4·9238676
79	4·2006829	4·8777370	79	4·1853932	4·8607015	79	4·1696587	4·8430951
80	4·1326565	4·7921072	80	4·1173668	4·7751705	80	4·1016323	4·7576693
81	4·0598039	4·7015732	81	4·0445142	4·6847287	81	4·0287797	4·6673287
82	3·9818188	4·6058584	82	3·9665291	4·5891030	82	3·9507946	4·5717984
83	3·8983849	4·5046784	83	3·8830952	4·4880058	83	3·8673607	4·4707924
84	3·8091751	4·3977342	84	3·7938854	4·3811416	84	3·7781509	4·3640131
85	3·7138523	4·2847183	85	3·6985626	4·2682003	85	3·6828281	4·2511539
86	3·6120089	4·1653096	86	3·5967792	4·1488629	86	3·5810447	4·1318931
87	3·5034671	4·0391761	87	3·4881774	4·0227970	87	3·4724429	4·0059000
88	3·3870787	3·9059744	88	3·3723890	3·8896591	88	3·3566545	3·8728314
89	3·2643253	3·7653496	89	3·2490356	3·7490936	89	3·2333011	3·7323310
90	3·1330178	3·6169322	90	3·1177281	3·6007345	90	3·1019936	3·5840326
91	2·9933573	3·4603426	91	2·9780676	3·4441981	91	2·9623331	3·4275552
92	2·8449342	3·2951863	92	2·8296145	3·2790931	92	2·8139100	3·2625052
93	2·6873287	3·1210557	93	2·6720390	3·1050102	93	2·6563045	3·0884749
94	2·5201106	2·9375229	94	2·5048209	2·9215252	94	2·4890864	2·9050383
95	2·3428395	2·7441420	95	2·3275498	2·7281874	95	2·3118153	2·7117499
96	2·1550646	2·5404321	96	2·1397749	2·5245207	96	2·1240404	2·5081282
97	1·9563247	2·3258644	97	1·9410350	2·3099946	97	1·9253005	2·2936474
98	1·7461484	2·0998226	98	1·7308587	2·0839951	98	1·7151242	2·0676923
99	1·5240540	1·8615260	99	1·5087643	1·8457397	99	1·4930298	1·8294839
100	1·2895492	1·6098515	100	1·2742595	1·5941151	100	1·2585250	1·5779064
101	1·0421317	1·3429574	101	1·0268420	1·3272752	101	1·0111075	1·3111285
102	0·7812887	1·0573504	102	0·7659990	1·0417242	102	0·7502645	1·0256458
103	0·5064971	0·7453715	103	0·4912074	0·7298287	103	0·4754729	0·7138264
104	0·2172235	0·3872118	104	0·2019338	0·3717880	104	0·1861993	0·3558919
105	9·9129241		105	9·8976344		105	9·8818999	
106	9·5930149		106	9·5777552		106	9·5620207	
107	9·2570215		107	9·2417318		107	9·2259973	
108	8·9042792		108	8·8889895		108	8·8732550	
109	8·5312329		109	8·5189432		109	8·5032087	

JOINT LIVES:—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	54		55			56		
Age of (x)	$\lambda\ D_{x,\,54}$	$\lambda\ N_{x,\,54}$	Age of (x)	$\lambda\ D_{x,\,55}$	$\lambda\ N_{x,\,55}$	Age of (x)	$\lambda\ D_{x,\,56}$	$\lambda\ N_{x,\,56}$
0	5·6939804	6·6755295	0	5·6772945	6·6486594	0	5·6600816	6·6208593
1	5·6099782	6·6547963	1	5·5932923	6·6276726	1	5·5760794	6·5996005
2	5·5746973	6·6409631	2	5·5580114	6·6137447	2	5·5407985	6·5855724
3	5·5525840	6·6292426	3	5·5358981	6·6019810	3	5·5186852	6·5737604
4	5·5356823	6·6185042	4	5·5189964	6·5912239	4	5·5017835	6·5629819
5	5·5214549	6·6083296	5	5·5047690	6·5810451	5	5·4875561	6·5527977
6	5·5090937	6·5985111	6	5·4924078	6·5712339	6	5·4751949	6·5429915
7	5·4979502	6·5889040	7	5·4812643	6·5616412	7	5·4640514	6·5334129
8	5·4875360	6·5794133	8	5·4708501	6·5521699	8	5·4536372	6·5239611
9	5·4777886	6·5699799	9	5·4611027	6·5427608	9	5·4438898	6·5145752
10	5·4685534	6·5605471	10	5·4518675	6·5333550	10	5·4346546	6·5051968
11	5·4596889	6·5510686	11	5·4430030	6·5239047	11	5·4257901	6·4957754
12	5·4510669	6·5415060	12	5·4343810	6·5143722	12	5·4171681	6·4862722
13	5·4425724	6·5318305	13	5·4258865	6·5047265	13	5·4086736	6·4766573
14	5·4341035	6·5220206	14	5·4174176	6·4949465	14	5·4002047	6·4669069
15	5·4255717	6·5120619	15	5·4088858	6·4850175	15	5·3916729	6·4570074
16	5·4169014	6·5019474	16	5·4002155	6·4749319	16	5·3830026	6·4469506
17	5·4080306	6·4916751	17	5·3913147	6·4646880	17	5·3741318	6·4367352
18	5·3989101	6·4812484	18	5·3822242	6·4542900	18	5·3650113	6·4263648
19	5·3895043	6·4706757	19	5·3728184	6·4437457	19	5·3556055	6·4158487
20	5·3797905	6·4599687	20	5·3631046	6·4330676	20	5·3458917	6·4051989
21	5·3697593	6·4491409	21	5·3530734	6·4222707	21	5·3358605	6·3944314
22	5·3596477	6·4382092	22	5·3429618	6·4113705	22	5·3257489	6·3835629
23	5·3494584	6·4271684	23	5·3327725	6·4003643	23	5·3155596	6·3725893
24	5·3391932	6·4160134	24	5·3225073	6·3892459	24	5·3052944	6·3615067
25	5·3288531	6·4047384	25	5·3121672	6·3780095	25	5·2949543	6·3503083
26	5·3184382	6·3933370	26	5·3017523	6·3666492	26	5·2845394	6·3389879
27	5·3079478	6·3817998	27	5·2912619	6·3551570	27	5·2740490	6·3275383
28	5·2973803	6·3701194	28	5·2806944	6·3435237	28	5·2634815	6·3159517
29	5·2867335	6·3582856	29	5·2700476	6·3317404	29	5·2528347	6·3042176
30	5·2760041	6·3462879	30	5·2593182	6·3197969	30	5·2421053	6·2923265
31	5·2651881	6·3341140	31	5·2485022	6·3076813	31	5·2312893	6·2802673
32	5·2542806	6·3217521	32	5·2375947	6·2953810	32	5·2203818	6·2680277
33	5·2432759	6·3091887	33	5·2265900	6·2828833	33	5·2093771	6·2555943
34	5·2321675	6·2964078	34	5·2154816	6·2701734	34	5·1982687	6·2429529
35	5·2209480	6·2833940	35	5·2042621	6·2572352	35	5·1870492	6·2300886
36	5·2096092	6·2701301	36	5·1929233	6·2440516	36	5·1757104	6·2169839
37	5·1981420	6·2565975	37	5·1814561	6·2306048	37	5·1642432	6·2036206
38	5·1865366	6·2427766	38	5·1698507	6·2168746	38	5·1526378	6·1899802
39	5·1747822	6·2286463	39	5·1580963	6·2028413	39	5·1408834	6·1760411
40	5·1628674	6·2141826	40	5·1461815	6·1884810	40	5·1289686	6·1617823
41	5·1507797	6·1993624	41	5·1340938	6·1737700	41	5·1168809	6·1471790
42	5·1385059	6·1841584	42	5·1218200	6·1586821	42	5·1046071	6·1322052
43	5·1260319	6·1685435	43	5·1093460	6·1431894	43	5·0921331	6·1168338
44	5·1133430	6·1524880	44	5·0966571	6·1272625	44	5·0794442	6·1010346
45	5·1004233	6·1359581	45	5·0837374	6·1108701	45	5·0665245	6·0847764
46	5·0872563	6·1189215	46	5·0705704	6·0939754	46	5·0533575	6·0680251
47	5·0738246	6·1013404	47	5·0571387	6·0765439	47	5·0399258	6·0507424
48	5·0601100	6·0831746	48	5·0434241	6·0585353	48	5·0262112	6·0328902
49	5·0460934	6·0643824	49	5·0294075	6·0399060	49	5·0121946	6·0144247
50	5·0317550	6·0449167	50	5·0150691	6·0206103	50	4·9978562	5·9952995
51	5·0170740	6·0247282	51	5·0003881	6·0005972	51	4·9831752	5·9754638
52	5·0017843	6·0037620	52	4·9850984	5·9798126	52	4·9678855	5·9548629
53	4·9860498	5·9819853	53	4·9693639	5·9582234	53	4·9521510	5·9334638
54	4·9698532	5·9593433	54	4·9531673	5·9357739	54	4·9359544	5·9112102

JOINT LIVES:—TWO MALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	54		55			56		
Age of (x)	$\lambda\ D_{x,\,54}$	$\lambda\ N_{x,\,54}$	Age of (x)	$\lambda\ D_{x,\,55}$	$\lambda\ N_{x,\,55}$	Age of (x)	$\lambda\ D_{x,\,56}$	$\lambda\ N_{x,\,56}$
55	4·9531673	5·9357739	55	4·9364814	5·9124022	55	4·9192085	5·8880401
56	4·9359544	5·9112102	56	4·9192085	5·8880401	56	4·9020556	5·8638849
57	4·9181664	5·8855795	57	4·9014805	5·8626143	57	4·8842676	5·8386700
58	4·8997149	5·8588026	58	4·8830590	5·8360456	58	4·8658461	5·8123156
59	4·8806213	5·8307950	59	4·8639354	5·8082482	59	4·8467225	5·7847358
60	4·8607165	5·8014670	60	4·8440306	5·7791312	60	4·8268177	5·7558384
61	4·8399412	5·7707214	61	4·8232553	5·7485980	61	4·8060424	5·7255255
62	4·8181957	5·7384565	62	4·8015098	5·7165450	62	4·7842969	5·6936940
63	4·7953700	5·7045639	63	4·7786841	5·6828631	63	4·7614712	5·6602330
64	4·7713138	5·6689287	64	4·7546579	5·6474370	64	4·7374150	5·6250265
65	4·7459864	5·6314296	65	4·7293005	5·6101446	65	4·7120876	5·5879519
66	4·7191568	5·5919383	66	4·7024709	5·5708570	66	4·6852580	5·5488797
67	4·6907037	5·5503196	67	4·6740178	5·5294387	67	4·6565049	5·5076731
68	4·6604656	5·5064314	68	4·6437797	5·4857459	68	4·6265568	5·4641889
69	4·6282703	5·4601229	69	4·6115844	5·4396290	69	4·5943715	5·4182750
70	4·5939357	5·4112565	70	4·5772198	5·3909288	70	4·5600369	5·3697738
71	4·5572691	5·3596053	71	4·5405832	5·3394787	71	4·5233703	5·3185172
72	4·5180675	5·3050557	72	4·5013816	5·2851036	72	4·4841087	5·2643299
73	4·4761178	5·2474032	73	4·4594319	5·2276203	73	4·4422190	5·2070282
74	4·4311962	5·1864551	74	4·4145103	5·1668355	74	4·3972974	5·1464189
75	4·3830689	5·1220094	75	4·3663830	5·1025469	75	4·3491701	5·0822995
76	4·3314915	5·0538549	76	4·3148056	5·0345426	76	4·2975927	5·0144579
77	4·2762096	4·9817697	77	4·2595237	4·9626013	77	4·2423108	4·9426726
78	4·2169582	4·9055223	78	4·2002723	4·8864918	78	4·1830594	4·8667120
79	4·1534621	4·8248638	79	4·1367762	4·8059716	79	4·1195633	4·7863346
80	4·0854357	4·7395597	80	4·0687198	4·7207859	80	4·0515369	4·7012873
81	4·0125831	4·6493280	81	3·9958972	4·6306744	81	3·9786843	4·6113051
82	3·9345980	4·5539022	82	3·9179121	4·5353617	82	3·9006992	4·5161158
83	3·8511641	4·4529949	83	3·8314782	4·4345625	83	3·8172653	4·4154340
84	3·7619543	4·3463099	84	3·7452684	4·3279798	84	3·7280555	4·3089633
85	3·6666315	4·2335382	85	3·6499156	4·2153057	85	3·6327327	4·1963951
86	3·5648481	4·1143621	86	3·5481622	4·0962198	86	3·5309493	4·0774104
87	3·4562463	3·9884479	87	3·4395604	3·9703934	87	3·4223475	3·9516774
88	3·3404579	3·8554537	88	3·3237720	3·8374811	88	3·3065591	3·8188565
89	3·2171045	3·7150251	89	3·2004186	3·6971291	89	3·1832057	3·6785894
90	3·0857970	3·5667933	90	3·0691111	3·5489714	90	3·0518982	3·5305109
91	2·9461365	3·4103793	91	2·9294506	3·3926266	91	2·9122377	3·3742430
92	2·7977134	3·2453898	92	2·7810275	3·2277027	92	2·7638146	3·2093911
93	2·6401079	3·0714161	93	2·6234220	3·0537920	93	2·6062091	3·0355486
94	2·4728898	2·8880340	94	2·4562039	2·8704689	94	2·4389910	2·8522915
95	2·2956187	2·6947956	95	2·2789328	2·6772875	95	2·2617199	2·6591724
96	2·1078438	2·4912258	96	2·0911579	2·4737700	96	2·0739450	2·4557156
97	1·9091039	2·2767931	97	1·8924180	2·2593922	97	1·8752051	2·2413953
98	1·6989276	2·0508865	98	1·6822417	2·0335392	98	1·6650288	2·0156007
99	1·4768332	1·8127282	99	1·4601473	1·7954351	99	1·4429344	1·7775573
100	1·2423284	1·5612052	100	1·2256425	1·5439713	100	1·2084296	1·5261570
101	0·9949109	1·2944839	101	0·9782250	1·2773181	101	0·9610121	1·2595772
102	0·7340679	1·0090853	102	0·7173820	0·9919921	102	0·7001691	0·9743413
103	0·4592763	0·6973601	103	0·4425904	0·6803808	103	0·4253775	0·6628334
104	0·1700027	0·3395309	104	0·1533168	0·3226947	104	0·1361039	0·3053084
105	9·8657033		105	9·8490174		105	9·8318045	
106	9·5458241		106	9·5291382		106	9·5119253	
107	9·2098007		107	9·1931148		107	9·1759019	
108	8·8570584		108	8·8403725		108	8·8231596	
109	8·4870121		109	8·4703262		109	8·4531133	

JOINT LIVES:—TWO MALES.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	57			58			59	
Age of (x)	$\lambda D_{x,57}$	$\lambda N_{x,57}$	Age of (x)	$\lambda D_{x,58}$	$\lambda N_{x,58}$	Age of (x)	$\lambda D_{x,59}$	$\lambda N_{x,59}$
0	5·6422936	6·5920655	0	5·6238721	6·5622088	0	5·6047185	6·5312133
1	5·5582914	6·5705168	1	5·5398699	6·5403509	1	5·5207463	6·5090264
2	5·5230105	6·5563795	2	5·5045890	6·5260967	2	5·4854654	6·4946468
3	5·5008972	6·5445163	3	5·4824757	6·5141762	3	5·4633521	6·4826645
4	5·4839955	6·5337126	4	5·4655740	6·5033457	4	5·4464504	6·4718023
5	5·4697681	6·5235211	5	5·4513466	6·4931437	5	5·4322230	6·4615892
6	5·4574069	6·5137194	6	5·4389854	6·4833454	6	5·4198618	6·4517913
7	5·4462634	6·5041531	7	5·4278419	6·4737909	7	5·4087183	6·4422482
8	5·4358192	6·4947206	8	5·4174277	6·4643761	8	5·3983041	6·4328513
9	5·4261018	6·4853583	9	5 4076803	6·4550377	9	5·3885567	6·4235352
10	5·4168666	6·4760060	10	5·3984151	6·4457122	10	5·3793215	6·4142371
11	5·4080021	6·4666143	11	5·3895806	6·4363487	11	5·3704570	6·4049026
12	5·3993801	6·4571412	12	5·3809586	6·4269066	12	5·3618350	6·3954899
13	5·3908856	6·4475558	13	5·3724641	6·4173519	13	5·3533405	6·3859668
14	5·3824167	6·4378362	14	5·3639952	6·4076618	14	5·3448716	6·3763072
15	5·3738849	6·4279659	15	5·3554634	6.3978215	15	5·3363398	6·3664958
16	5·3652146	6·4179380	16	5·3467931	6·3878220	16	5·3276695	6·3565253
17	5·3563138	6·4077503	17	5·3379223	6·3776622	17	5·3187987	6·3463929
18	5·3472233	6·3974075	18	5·3288018	6·3673464	18	5·3096782	6·3361039
19	5·3378175	6·3869188	19	5·3193960	6·3568844	19	5·3002724	6·3256679
20	5·3281037	6·3762970	20	5·3096822	6·3462894	20	5·2905586	6·3150994
21	5·3180725	6·3655579	21	5·2996510	6·3355784	21	5·2805274	6·3044153
22	5·3079609	6·3547197	22	5·2895394	6·3247699	22	5·2704158	6·2936354
23	5·2977716	6·3437788	23	5·2793501	6·3138601	23	5·2602265	6·2827559
24	5·2875064	6·3327299	24	5·2690849	6·3028448	24	5·2499613	6·2717731
25	5·2771663	6·3215686	25	5·2587448	6·2917184	25	5·2396212	6·2606814
26	5·2667514	6·3102873	26	5·2483299	6·2804757	26	5·2292063	6·2494748
27	5·2562610	6·2988795	27	5·2378395	6·2691084	27	5·2187159	6·2381475
28	5·2456935	6·2873370	28	5·2272720	6·2576092	28	5·2081484	6·2266901
29	5·2350467	6·2756513	29	5·2166252	6·2459695	29	5·1975016	6·2150954
30	5·2243173	6·2638114	30	5·2058958	6·2341798	30	5·1867722	6·2033533
31	5·2135013	6·2518068	31	5·1950798	6·2222283	31	5 1759562	6·1914541
32	5·2025938	6·2396261	32	5·1841723	6·2101041	32	5·1650487	6·1793852
33	5·1915891	6·2272554	33	5·1731676	6·1977949	33	5·1540140	6·1671347
34	5·1804807	6·2146809	34	5·1620592	6·1852860	34	5·1429356	6·1546893
35	5·1692612	6·2018880	35	5·1508397	6·1725624	35	5·1317161	6·1420342
36	5·1579224	6·1888602	36	5·1395009	6·1596090	36	5·1203773	6·1291528
37	5·1464552	6·1755791	37	5·1280337	6·1464080	37	5·1089101	6·1160293
38	5·1348198	6·1620258	38	5·1164283	6·1329400	38	5·0973047	6·1026450
39	5·1230954	6·1481805	39	5·1046739	6·1191856	39	5·0855503	6·0889790
40	5·1111806	6·1340202	40	5·0927591	6·1051227	40	5·0736355	6·0750109
41	5·0990929	6·1195224	41	5·0806714	6·0907277	41	5·0615478	6·0607175
42	5·0868191	6·1046612	42	5·0683976	6·0759767	42	5·0492740	6·0460735
43	5·0743451	6·0894088	43	5·0559236	6·0608417	43	5·0368000	6·0310532
44	5·0616562	6·0737359	44	5·0432347	6·0452933	44	5·0241111	6·0156272
45	5·0487365	6·0576110	45	5·0303150	6·0293001	45	5·0111014	5·9997637
46	5·0355695	6·0410005	46	5·0171480	6·0128284	46	4·9980244	5·9834296
47	5·0221378	6·0238670	47	5·0037163	5·9958422	47	4·9845927	5·9665885
48	5·0084232	6·0061703	48	4·9900017	5·9783009	48	4·9708781	5·9492010
49	4·9944066	5·9878685	49	4·9759551	5·9601619	49	4·9568615	5·9312237
50	4·9800682	5·9689143	50	4·9616467	5·9413784	50	4·9425231	5·9126101
51	4·9653872	5·9492569	51	4·9469657	5·9218997	51	4·9278421	5·8933094
52	4·9500975	5·9288410	52	4·9316760	5·9016697	52	4·9125524	5·8732656
53	4·9343930	5·9076341	53	4·9159115	5·8806562	53	4·8968179	5·8524465
54	4·9181664	5·88555795	54	4·8997149	5·8588026	54	4·8806213	5·8307950

JOINT LIVES:—TWO MALES.

Logarithms of the Series $D_{x, y}$ and $N_{x, y}$.

Age of (y)	57			58			59	
Age of (x)	λ $D_{x, 57}$	λ $N_{x, 57}$	**Age** of (x)	λ $D_{x, 58}$	λ $N_{x, 58}$	**Age** of (x)	λ $D_{x, 59}$	λ $N_{x, 59}$
55	4·9014805	5·8626143	55	4·8830590	5·8360456	55	4·8639354	5·8082482
56	4·8842676	5·8386700	56	4·8658461	5·8123156	56	4·8467225	5·7847358
57	4·8664796	5·8136715	57	4·8480581	5·7875375	57	4·8289345	5·7601815
58	4·8480581	5·7875375	58	4·8296366	5·7616296	58	4·8105130	5·7345038
59	4·8289345	5·7601815	59	4·8105130	5·7345038	59	4·7913894	5·7076140
60	4·8090297	5·7315112	60	4·7906082	5·7060671	60	4·7714846	5·6794173
61	4·7882544	5·7014275	61	4·7698329	5·6762202	61	4·7507093	5·6498137
62	4·7665089	5·6698258	62	4·7480874	5·6448571	62	4·7289638	5·6186972
63	4·7436832	5·6365956	63	4·7252617	5·6118661	63	4·7061381	5·5859547
64	4·7196570	5·6016191	64	4·7012355	5·5771302	64	4·6821119	5·5514673
65	4·6942996	5·5647732	65	4·6758781	5·5405232	65	4·6567545	5·5151103
66	4·6674700	5·5259273	66	4·6490485	5·5019151	66	4·6299249	5·4767504
67	4·6390169	5·4849447	67	4·6205954	5·4611677	67	4·6014718	5·4362497
68	4·6087788	5·4416805	68	4·5903573	5·4181360	68	4·5712337	5·3934621
69	4·5765835	5·3959834	69	4·5581620	5·3726674	69	4·5390384	5·3482344
70	4·5422489	5·3476931	70	4·5238274	5·3246018	70	4·5047038	5·3004055
71	4·5055823	5·2966431	71	4·4871608	5·2737705	71	4·4680372	5·2498072
72	4·4663807	5·2426567	72	4·4479592	5·2199982	72	4·4288356	5·1962613
73	4·4244310	5·1855496	73	4·4060095	5·1630993	73	4·3868859	5·1395842
74	4·3795094	5·1251286	74	4·3610879	5·1028801	74	4·3419643	5·0795803
75	4·3313821	5·0611915	75	4·3129606	5·0391380	75	4·2938370	5·0160471
76	4·2798047	4·9935253	76	4·2613832	4·9716608	76	4·2422596	4·9487718
77	4·2245228	4·9219091	77	4·2061013	4·9002262	77	4·1869777	4·8775320
78	4·1652714	4·8461100	78	4·1468199	4·8246022	78	4·1277263	4·8020961
79	4·1017753	4·7658868	79	4·0833538	4·7445464	79	4·0642302	4·7222217
80	4·0337189	4·6809878	80	4·0153274	4·6598069	80	3·9962038	4·6376558
81	3·9608963	4·5911476	81	3·9424748	4·5701209	81	3·9233512	4·5481354
82	3·8829112	4·4960934	82	3·8644897	4·4752134	82	3·8453661	4·4533864
83	3·7994773	4·3955396	83	3·7810558	4·3747995	83	3·7619322	4·3531246
84	3·7102675	4·2891904	84	3·6918460	4·2685832	84	3·6727224	4·2470529
85	3·6149447	4·1767385	85	3·5965232	4·1562571	85	3·5773996	4·1348643
86	3·5131613	4·0578638	86	3·4947398	4·0375030	86	3·4756162	4·0162405
87	3·4045595	3·9322357	87	3·3861380	3·9119892	87	3·3670144	3·8908518
88	3·2887711	3·7995115	88	3·2703496	3·7793735	88	3·2512260	3·7583546
89	3·1654177	3·6593390	89	3·1469962	3·6393022	89	3·1278726	3·6183954
90	3·0341102	3·5113498	90	3·0156887	3·4914107	90	2·9965651	3·4706093
91	2·8944197	3·3551645	91	2·8760282	3·3353171	91	2·8569046	3·3146171
92	2·7460266	3·1903919	92	2·7276051	3·1706316	92	2·7084815	3·1500271
93	2·5884211	3·0166243	93	2·5699996	2·9969471	93	2·5508760	2·9764339
94	2·4212030	2·8334385	94	2·4027815	2·8138398	94	2·3836579	2·7934132
95	2·2439319	2·6403890	95	2·2255104	2·6208655	95	2·2063868	2·6005210
96	2·0561570	2·4369986	96	2·0377355	2·4175481	96	2·0186119	2·3972846
97	1·8574171	2·2227422	97	1·8389956	2·2033634	97	1·8198720	2·1831785
98	1·6472408	1·9970122	98	1·6288193	1·9777048	98	1·6096957	1·9575987
99	1·4251464	1·7590352	99	1·4067249	1·7398009	99	1·3876013	1·7197769
100	1·1906416	1·5077075	100	1·1722201	1·4885521	100	1·1530965	1·4686146
101	0·9432241	1·2412052	101	0·9248026	1·2221414	101	0·9056790	1·2023030
102	0·6823811	0·9560675	102	0·6639596	0·9371065	102	0·6448360	0·9173900
103	0·4075895	0·6446847	103	0·3891680	0·6258575	103	0·3700444	0·6062846
104	0·1183159	0·2873090	104	0·0998944	0·2686482	104	0·0807708	0·2492718
105	9·8140165		105	9·7955950		105	9·7764714	
106	9·4941373		106	9·4757158		106	9·4565922	
107	9·1581139		107	9·1396924		107	9·1205688	
108	8·8053716		108	8·7869501		108	8·7678265	
109	8·4353253		109	8·4169038		109	8·3977802	

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Logarithms of the Series $D_{x,\ y}$ and $N_{x,\ y}$.

Age of (y)	60			61			62	
Age of (x)	$\lambda\ D_{x,\ 60}$	$\lambda\ N_{x,\ 60}$	Age of (x)	$\lambda\ D_{x,\ 61}$	$\lambda\ N_{x,\ 61}$	Age of (x)	$\lambda\ D_{x,\ 62}$	$\lambda\ N_{x,\ 62}$
0	5·5848437	6·4989987	0	5·5640684	6·4654766	0	5·5423229	6·4305527
1	5·5008415	6·4764602	1	5·4800662	6·4425647	1	5·4583207	6·4072439
2	5·4655606	6·4619469	2	5·4447853	6·4279073	2	5·4230398	6·3924333
3	5·4434473	6·4498975	3	5·4226720	6·4157859	3	5·4009265	6·3802333
4	5·4265456	6·4390007	4	5·4057703	6·4048508	4	5·3840248	6·3692566
5	5·4123182	6·4287725	5	5·3915429	6·3946055	5	5·3697974	6·3589911
6	5·3999570	6·4189753	6	5·3791817	6·3848054	6	5·3574362	6·3491868
7	5·3888135	6·4094409	7	5·3680382	6·3752803	7	5·3462927	6·3396682
8	5·3783993	6·4000615	8	5·3576240	6·3659161	8	5·3358785	6·3303202
9	5·3686519	6·3907681	9	5·3478766	6·3566455	9	5·3261311	6·3210702
10	5·3594167	6·3814959	10	5·3386414	6·3474000	10	5·3168959	6·3118515
11	5·3505522	6·3721913	11	5·3297769	6·3381239	11	5·3080314	6·3026047
12	5·3419302	6·3628090	12	5·3211549	6·3287729	12	5·2994094	6·2932840
13	5·3334357	6·3533157	13	5·3126604	6·3193105	13	5·2909149	6·2838537
14	5·3249668	6·3436876	14	5·3041915	6·3097121	14	5·2824460	6·2742858
15	5·3164350	6·3339061	15	5·2956597	6·2999612	15	5·2739142	6·2645637
16	5·3077647	6·3239633	16	5·2869894	6·2900471	16	5·2652439	6·2546791
17	5·2988939	6·3138588	17	5·2781186	6·2799689	17	5·2563731	6·2446281
18	5·2897734	6·3035960	18	5·2689981	6·2697326	18	5·2472526	6·2344165
19	5·2803676	6·2931857	19	5·2595923	6·2593475	19	5·2378468	6·2240566
20	5·2706538	6·2826427	20	5·2498785	6·2488295	20	5·2281330	6·2135629
21	5·2606226	6·2719851	21	5·2398473	6·2381972	21	5·2181018	6·2029553
22	5·2505110	6·2612327	22	5·2297357	6·2274720	22	5·2079902	6·1922559
23	5·2403217	6·2503830	23	5·2195464	6·2166504	23	5·1978009	6·1814623
24	5·2300565	6·2394311	24	5·2092812	6·2057290	24	5·1875357	6·1705701
25	5·2197164	6·2283729	25	5·1989411	6·1947030	25	5·1771956	6·1595750
26	5·2093015	6·2172020	26	5·1885262	6·1835668	26	5·1667807	6·1484722
27	5·1988111	6·2059121	27	5·1780358	6·1723136	27	5·1562903	6·1372547
28	5·1882436	6·1944963	28	5·1674683	6·1609365	28	5·1457228	6·1259158
29	5·1775968	6·1829449	29	5·1568215	6·1494280	29	5·1350760	6·1144472
30	5·1668674	6·1712495	30	5·1460921	6·1377774	30	5·1243166	6·1028410
31	5·1560514	6·1593996	31	5·1352761	6·1259762	31	5·1135306	6·0910863
32	5·1451439	6·1473851	32	5·1243686	6·1140125	32	5·1026231	6·0791729
33	5·1341392	6·1351918	33	5·1133639	6·1018759	33	5·0916184	6·0670892
34	5·1230308	6·1228078	34	5·1022555	6·0895512	34	5·0805100	6·0548229
35	5·1118113	6·1102182	35	5·0910360	6·0770254	35	5·0692905	6·0423589
36	5·1004725	6·0974083	36	5·0796972	6·0642835	36	5·0579517	6·0296828
37	5·0890053	6·0843596	37	5·0682300	6·0513088	37	5·0464845	6·0167789
38	5·0773999	6·0710557	38	5·0566246	6·0380830	38	5·0348791	6·0036298
39	5·0656455	6·0574767	39	5·0448703	6·0245875	39	5·0231247	5·9902158
40	5·0537307	6·0436008	40	5·0329554	6·0108018	40	5·0112099	5·9765168
41	5·0416430	6·0294061	41	5·0208677	5·9967030	41	4·9991222	5·9625115
42	5·0293692	6·0148677	42	5·0085939	5·9822676	42	4·9868184	5·9481757
43	5·0168952	5·9999592	43	4·9961199	5·9674686	43	4·9743744	5·9334837
44	5·0042063	5·9846524	44	4·9834310	5·9522786	44	4·9616855	5·9184078
45	4·9912866	5·9689166	45	4·9705113	5·9366672	45	4·9487658	5·9029177
46	4·9781196	5·9527177	46	4·9573143	5·9206009	46	4·9355988	5·8869811
47	4·9646879	5·9360199	47	4·9439126	5·9040439	47	4·9221671	5·8705621
48	4·9509733	5·9187838	48	4·9301980	5·8869569	48	4·9084525	5·8536217
49	4·9369567	5·9009667	49	4·9161814	5·8692979	49	4·8944359	5·8361180
50	4·9226183	5·8825218	50	4·9018430	5·8510198	50	4·8800975	5·8180043
51	4·9079373	5·8633981	51	4·8871620	5·8320717	51	4·8654165	5·7992299
52	4·8926476	5·8435398	52	4·8718723	5·8123977	52	4·8501268	5·7797384
53	4·8769131	5·8229152	53	4·8561378	5·7919667	53	4·8343923	5·7594996
54	4·8607165	5·8014670	54	4·8399412	5·7707214	54	4·8181957	5·7384565

JOINT LIVES:—Two Males.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	60			61			62	
Age of (x)	$\lambda D_{x,60}$	$\lambda N_{x,60}$	Age of (x)	$\lambda D_{x,61}$	$\lambda N_{x,61}$	Age of (x)	$\lambda D_{x,62}$	$\lambda N_{x,62}$
55	4·8440306	5·7791312	55	4·8232553	5·7485980	55	4·8015098	5·7165450
56	4·8268177	5·7558384	56	4·8060424	5·7255255	56	4·7842969	5·6936940
57	4·8090297	5·7315112	57	4·7882544	5·7014275	57	4·7665089	5·6698258
58	4·7906082	5·7060671	58	4·7698329	5·6762202	58	4·7480874	5·6448571
59	4·7714846	5·6794173	59	4·7507093	5·6498137	59	4·7289638	5·6186972
60	4·7515798	5·6514664	60	4·7308045	5·6221128	60	4·7090590	5·5912493
61	4·7308045	5·6221128	61	4·7100292	5·5930148	61	4·6882837	5·5624113
62	4·7090590	5·5912493	62	4·6882837	5·5624113	62	4·6665382	5·5320733
63	4·6862333	5·5587633	63	4·6654580	5·5301879	63	4·6437125	5·5001196
64	4·6622071	5·5245338	64	4·6414318	5·4962247	64	4·6196863	5·4664285
65	4·6368497	5·4884350	65	4·6160744	5·4603932	65	4·5943289	5·4308729
66	4·6100201	5·4503343	66	4·5892448	5·4225599	66	4·5674993	5·3933165
67	4·5815670	5·4100908	67	4·5607917	5·3825850	67	4·5390462	5·3536179
68	4·5513289	5·3675587	68	4·5305536	5·3403190	68	4·5088081	5·3116294
69	4·5191336	5·3225837	69	4·4983583	5·2956082	69	4·4766128	5·2671936
70	4·4847990	5·2750043	70	4·4640237	5·2482902	70	4·4422782	5·2201478
71	4·4481324	5·2246509	71	4·4273571	5·1981943	71	4·4056116	5·1703216
72	4·4089308	5·1713461	72	4·3881555	5·1451423	72	4·3664100	5·1175354
73	4·3669811	5·1149028	73	4·3462058	5·0889479	73	4·3244603	5·0616013
74	4·3220595	5·0551282	74	4·3012842	5·0294146	74	4·2795387	5·0023246
75	4·2739322	4·9918173	75	4·2531569	4·9663403	75	4·2314114	4·9394988
76	4·2223548	4·9247578	76	4·2015795	4·8995103	76	4·1798340	4·8729122
77	4·1670729	4·8537268	77	4·1462976	4·8287018	77	4·1245521	4·8023399
78	4·1078215	4·7784920	78	4·0870462	4·7536826	78	4·0653007	4·7275494
79	4·0443254	4·6988119	79	4·0235501	4·6742097	79	4·0018046	4·6482986
80	3·9762990	4·6144331	80	3·9555237	4·5900311	80	3·9337782	4·5643338
81	3·9034464	4·5250919	81	3·8826711	4·5008825	81	3·8609256	4·4753910
82	3·8254613	4·4305146	82	3·8046860	4·4064901	82	3·7829105	4·3811968
83	3·7420274	4·3304164	83	3·7212521	4·3065691	83	3·6995066	4·2814661
84	3·6528176	4·2245020	84	3·6320423	4·2008234	84	3·6102968	4·1759027
85	3·5574948	4·1124633	85	3·5367195	4·0889468	85	3·5149740	4·0642000
86	3·4557114	3·9939813	86	3·4349361	3·9706197	86	3·4131906	3·9460399
87	3·3471096	3·8687273	87	3·3263343	3·8455123	87	3·3045888	3·8210921
88	3·2313212	3·7363599	88	3·2105459	3·7132839	88	3·1888004	3·6890148
89	3·1079678	3·5965234	89	3·0871925	3·5735817	89	3·0654470	3·5494557
90	2·9766603	3·4488531	90	2·9558850	3·4260379	90	2·9341395	3·4020506
91	2·8369998	3·2929712	91	2·8162245	3·2702765	91	2·7944790	3·2464201
92	2·6885767	3·1284862	92	2·6678014	3·1059058	92	2·6460559	3·0821741
93	2·5309712	2·9549922	93	2·5101959	2·9325209	93	2·4884504	2·9089079
94	2·3637531	2·7720671	94	2·3429778	2·7496992	94	2·3212323	2·7261997
95	2·1864820	2·5792667	95	2·1657067	2·5569992	95	2·1439612	2·5336081
96	1·9987071	2·3761169	96	1·9779318	2·3539461	96	1·9561863	2·3306610
97	1·7999672	2·1620976	97	1·7791919	2·1400216	97	1·7574464	2·1168401
98	1·5897909	1·9366042	98	1·5690156	1·9146223	98	1·5472701	1·8915452
99	1·3676965	1·6988718	99	1·3469212	1·6769879	99	1·3251757	1·6540166
100	1·1331917	1·4478075	100	1·1124164	1·4260295	100	1·0906709	1·4031737
101	0·8857742	1·1816064	101	0·8649989	1·1599520	101	0·8432534	1·1372275
102	0·6249312	0·8968237	102	0·6041559	0·8753160	102	0·5824104	0·8527605
103	0·3501396	0·5858892	103	0·3293643	0·5645595	103	0·3076188	0·5422028
104	0·0608660	0·2290672	104	0·0400907	0·2080111	104	0·0183452	0·1859103
105	9·7565666		105	9·7357913		105	9·7140458	
106	9·4366874		106	9·4159121		106	9·3941666	
107	9·1006640		107	9·0798887		107	9·0581432	
108	8·7479217		108	8·7271464		108	8·7054009	
109	8·3778754		109	8·3571001		109	8·3353546	

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	63			64			65	
Age of (x)	λ $D_{x,\,63}$	λ $N_{x,\,63}$	Age of (x)	λ $D_{x,\,64}$	λ $N_{x,\,64}$	Age of (x)	λ $D_{x,\,65}$	λ $N_{x,\,65}$
0	5·5194972	6·3941253	0	5·4954710	6·3560866	0	5·4701136	6·3163210
1	5·4354950	6·3703957	1	5·4114688	6·3319107	1	5·3861114	6·2916731
2	5·4002141	6·3554219	2	5·3761879	6·3167638	2	5·3508305	6·2763421
3	5·3781068	6·3431381	3	5·3540746	6·3043900	3	5·3287172	6·2638722
4	5·3611991	6·3321145	4	5·3371729	6·2933161	4	5·3118155	6·2527441
5	5·3469717	6·3218266	5	5·3229455	6·2830019	5	5·2975881	6·2424006
6	5·3346105	6·3120161	6	5·3105843	6·2731831	6	5·2852269	6·2325707
7	5·3234670	6·3025030	7	5·2994408	6·2636739	7	5·2740834	6·2230638
8	5·3130528	6·2931684	8	5·2890266	6·2543525	8	5·2636692	6·2137541
9	5·3033054	6·2839406	9	5·2792792	6·2451444	9	5·2539218	6·2045657
10	5·2940702	6·2747468	10	5·2700440	6·2359771	10	5·2446866	6·1954230
11	5·2852057	6·2655298	11	5·2611795	6·2267883	11	5·2358221	6·1862640
12	5·2765837	6·2562401	12	5·2525575	6·2175300	12	5·2272001	6·1770358
13	5·2680892	6·2468406	13	5·2440630	6·2081622	13	5·2187056	6·1677004
14	5·2596203	6·2373044	14	5·2355941	6·1986569	14	5·2102367	6·1582261
15	5·2510885	6·2276121	15	5·2270623	6·1889951	15	5·2017049	6·1485943
16	5·2424182	6·2177548	16	5·2183920	6·1791662	16	5·1930346	6·1387942
17	5·2335174	6·2077316	17	5·2095212	6·1691685	17	5·1841638	6·1288233
18	5·2244269	6·1975458	18	5·2004007	6·1590086	18	5·1750433	6·1186869
19	5·2150211	6·1872090	19	5·1909949	6·1486961	19	5·1656375	6·1083986
20	5·2053073	6·1767394	20	5·1812811	6·1382483	20	5·1559237	6·0979740
21	5·1952761	6·1661559	21	5·1712499	6·1276885	21	5·1458925	6·0874354
22	5·1851645	6·1554818	22	5·1611383	6·1170389	22	5·1357809	6·0768096
23	5·1749752	6·1447146	23	5·1509490	6·1062973	23	5·1255916	6·0660932
24	5·1647100	6·1338507	24	5·1406838	6·0954609	24	5·1153264	6·0552828
25	5·1543699	6·1228860	25	5·1303437	6·0845252	25	5·1049863	6·0443751
26	5·1439550	6·1118147	26	5·1199288	6·0734852	26	5·0945714	6·0333650
27	5·1334646	6·1006321	27	5·1094384	6·0623348	27	5·0840810	6·0222469
28	5·1228971	6·0893296	28	5·0988709	6·0510684	28	5·0735135	6·0110140
29	5·1122503	6·0779007	29	5·0882241	6·0396770	29	5·0628667	5·9996594
30	5·1015209	6·0663360	30	5·0774947	6·0281534	30	5·0521373	5·9881744
31	5·0907049	6·0546269	31	5·0666787	6·0164872	31	5·0413213	5·9765508
32	5·0797974	6·0427617	32	5·0557712	6·0046691	32	5·0304138	5·9647771
33	5·0687927	6·0307300	33	5·0447665	5·9926874	33	5·0194091	5·9528438
34	5·0576843	6·0185188	34	5·0336581	5·9805297	34	5·0083007	5·9407381
35	5·0464648	6·0061150	35	5·0224386	5·9681831	35	4·9970812	5·9284472
36	5·0351260	5·9935033	36	5·0110998	5·9556338	36	4·9857424	5·9159569
37	5·0236588	5·9806677	37	4·9996326	5·9428647	37	4·9742752	5·9032520
38	5·0120534	5·9675920	38	4·9880272	5·9298598	38	4·9626698	5·8903160
39	5·0002990	5·9542570	39	4·9762728	5·9166011	39	4·9509154	5·8771308
40	4·9883842	5·9406428	40	4·9643580	5·9030688	40	4·9390006	5·8636775
41	4·9762965	5·9267278	41	4·9522703	5·8892416	41	4·9269129	5·8499352
42	4·9640227	5·9124890	42	4·9399965	5·8750965	42	4·9146391	5·8358810
43	4·9515487	5·8979008	43	4·9275225	5·8606089	43	4·9021651	5·8214907
44	4·9388598	5·8829357	44	4·9148336	5·8457518	44	4·8894762	5·8067379
45	4·9259401	5·8675644	45	4·9019139	5·8304955	45	4·8765565	5·7915935
46	4·9127731	5·8517538	46	4·8887469	5·8148084	46	4·8633895	5·7760260
47	4·8993414	5·8354697	47	4·8753152	5·7986553	47	4·8499578	5·7600011
48	4·8856268	5·8186730	48	4·8616006	5·7819989	48	4·8362432	5·7434807
49	4·8716102	5·8013217	49	4·8475840	5·7647967	49	4·8222266	5·7264242
50	4·8572718	5·7833695	50	4·8332156	5·7470030	50	4·8078882	5·7087854
51	4·8425908	5·7647661	51	4·8185646	5·7285671	51	4·7932072	5·6905138
52	4·8273011	5·7454549	52	4·8032749	5·7094334	52	4·7779175	5·6715538
53	4·8115666	5·7254064	53	4·7875404	5·6895728	53	4·7621830	5·6518780
54	4·7953700	5·7045639	54	4·7713138	5·6689287	54	4·7459804	5·6314296

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	63			64			65	
Age of (x)	$\lambda\ D_{x,\,63}$	$\lambda\ N_{x,\,63}$	Age of (x)	$\lambda\ D_{x,\,64}$	$\lambda\ N_{x,\,64}$	Age of (x)	$\lambda\ D_{x,\,65}$	$\lambda\ N_{x,\,65}$
55	4·7786841	5·6828631	55	4·7546579	5·6474370	55	4·7293005	5·6101446
56	4·7614712	5·6602330	56	4·7374150	5·6250265	56	4·7120576	5·5879519
57	4·7436832	5·6365956	57	4·7196570	5·6016191	57	4·6942996	5·5647732
58	4·7252617	5·6118661	58	4·7012355	5·5771302	58	4·6758781	5·5405232
59	4·7061381	5·5859547	59	4·6821119	5·5514673	59	4·6567545	5·5151103
60	4·6862333	5·5587633	60	4·6622071	5·5245338	60	4·6368497	5·4884350
61	4·6654580	5·5301879	61	4·6414318	5·4962247	61	4·6160744	5·4603932
62	4·6437125	5·5001196	62	4·6196863	5·4664285	62	4·5943289	5·4308729
63	4·6208868	5·4684410	63	4·5968606	5·4350295	63	4·5715032	5·3997552
64	4·5968606	5·4350295	64	4·5728344	5·4019022	64	4·5474770	5·3669169
65	4·5715032	5·3997552	65	4·5474770	5·3669169	65	4·5221196	5·3322253
66	4·5446736	5·3624840	66	4·5206474	5·3299362	66	4·4952900	5·2955425
67	4·5162205	5·3230713	67	4·4921943	5·2908178	67	4·4668369	5·2567232
68	4·4859824	5·2813682	68	4·4619562	5·2494092	68	4·4365988	5·2156177
69	4·4537871	5·2372184	69	4·4297609	5·2055532	69	4·4044035	5·1720648
70	4·4194525	5·1904561	70	4·3954263	5·1590854	70	4·3700689	5·1258988
71	4·3827859	5·1409104	71	4·3587597	5·1098312	71	4·3334023	5·0769469
72	4·3435843	5·0884016	72	4·3195581	5·0576106	72	4·2942007	5·0250256
73	4·3016346	5·0327412	73	4·2776084	5·0022352	73	4·2522510	4·9699454
74	4·2567130	4·9737322	74	4·2326868	4·9435069	74	4·2073294	4·9115092
75	4·2085857	4·9111699	75	4·1845595	4·8812197	75	4·1592021	4·8495097
76	4·1570083	4·8448386	76	4·1329821	4·8151585	76	4·1076247	4·7837300
77	4·1017264	4·7745170	77	4·0777002	4·7450982	77	4·0523428	4·7139464
78	4·0424750	4·6999686	78	4·0184488	4·6708079	78	3·9930914	4·6399237
79	3·9789789	4·6209532	79	3·9549527	4·5920401	79	3·9295953	4·5614186
80	3·9109525	4·5372155	80	3·8869263	4·5085437	80	3·8615689	4·4781764
81	3·8380999	4·4484927	81	3·8140737	4·4200539	81	3·7887163	4·3899331
82	3·7601148	4·3545097	82	3·7360886	4·3262963	82	3·7107312	4·2964140
83	3·6766809	4·2549827	83	3·6526547	4·2269855	83	3·6272973	4·1973337
84	3·5874711	4·1496150	84	3·5634449	4·1218267	84	3·5380875	4·0923961
85	3·4921483	4·0380993	85	3·4681221	4·0105120	85	3·4427647	3·9812944
86	3·3903649	3·9201181	86	3·3663387	3·8927222	86	3·3409813	3·8637106
87	3·2817631	3·7953418	87	3·2577369	3·7681295	87	3·2323795	3·7393136
88	3·1659747	3·6634286	88	3·1419485	3·6363926	88	3·1165911	3·6077648
89	3·0426213	3·5240259	89	3·0185951	3·4971578	89	2·9932377	3·4687098
90	2·9113138	3·3767687	90	2·8872876	3·3500605	90	2·8619302	3·3217852
91	2·7716533	3·2212802	91	2·7476271	3·1947247	91	2·7222697	3·1666134
92	2·6232302	3·0571691	92	2·5992040	3·0307600	92	2·5738466	3·0028056
93	2·4656247	2·8840320	93	2·4415985	2·8577617	93	2·4162411	2·8299582
94	2·2984066	2·7014471	94	2·2743804	2·6753108	94	2·2490230	2·6476509
95	2·1211355	2·5089739	95	2·0971093	2·4829650	95	2·0717519	2·4554449
96	1·9333606	2·3061416	96	1·9093344	2·2802582	96	1·8839770	2·2528702
97	1·7346207	2·0924336	97	1·7105945	2·0666722	97	1·6852371	2·0394173
98	1·5244444	1·8672518	98	1·5004182	1·8416135	98	1·4750608	1·8144907
99	1·3023500	1·6298417	99	1·2783238	1·6043309	99	1·2529664	1·5773470
100	1·0678452	1·3791241	100	1·0438190	1·3537528	100	1·0184616	1·3269193
101	0·8204277	1·1133215	101	0·7964015	1·0881077	101	0·7710441	1·0614487
102	0·5595847	0·8290270	102	0·5355585	0·8040031	102	0·5102011	0·7775501
103	0·2847931	0·5187113	103	0·2607669	0·4939318	103	0·2354095	0·4677413
104	9·9955195	0·1626839	104	9·9714933	0·1382711	104	9·9461359	0·1124374
105	9·6912201		105	9·6671939		105	9·6418365	
106	9·3713409		106	9·3473147		106	9·3219573	
107	9·0353175		107	9·0112913		107	8·9859339	
108	8·6825752		108	8·6585490		108	8·6331916	
109	8·3125289		109	8·2885027		109	8·2631453	

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	66			67			68	
Age of (x)	λ $D_{x,\,66}$	λ $N_{x,\,66}$	Age of (x)	λ $D_{x,\,67}$	λ $N_{x,\,67}$	Age of (x)	λ $D_{x,\,68}$	λ $N_{x,\,68}$
0	5·4432840	6·2747043	0	5·4148309	6·2311065	0	5·3845928	6·1853872
1	5·3592818	6·2495589	1	5·3308287	6·2054356	1	5·3005906	6·1591643
2	5·3240009	6·2340331	2	5·2955478	6·1897053	2	5·2653097	6·1432175
3	5·3018876	6·2214607	3	5·2734345	6·1770241	3	5·2431964	6·1304222
4	5·2849859	6·2102735	4	5·2565328	6·1657733	4	5·2262947	6·1191034
5	5·2707585	6·1998983	5	5·2423054	6·1553621	5	5·2120673	6·1086530
6	5·2583973	6·1900548	6	5·2299442	6·1455035	6	5·1997061	6·0987756
7	5·2472538	6·1805482	7	5·2188007	6·1359946	7	5·1885626	6·0892638
8	5·2368396	6·1712489	8	5·2083865	6·1267046	8	5·1781484	6·0799807
9	5·2270922	6·1620790	9	5·1986391	6·1175524	9	5·1684010	6·0708451
10	5·2178570	6·1529613	10	5·1894039	6·1084584	10	5·1591658	6·0617747
11	5·2089925	6·1438301	11	5·1805394	6·0993560	11	5·1503013	6·0527001
12	5·2003705	6·1346341	12	5·1719174	6·0901900	12	5·1416793	6·0435650
13	5·1918760	6·1253294	13	5·1634229	6·0809182	13	5·1331848	6·0343244
14	5·1834071	6·1158874	14	5·1549540	6·0715068	14	5·1247159	6·0249456
15	5·1748753	6·1062858	15	5·1464222	6·0619363	15	5·1161841	6·0154046
16	5·1662050	6·0965138	16	5·1377519	6·0521929	16	5·1075138	6·0056905
17	5·1573342	6·0865695	17	5·1288811	6·0422746	17	5·0986430	5·9957984
18	5·1482137	6·0764581	18	5·1197606	6·0321875	18	5·0895225	5·9857350
19	5·1388079	6·0661914	19	5·1103548	6·0219436	19	5·0801167	5·9755131
20	5·1290941	6·0557891	20	5·1006410	6·0115615	20	5·0704029	5·9651523
21	5·1190629	6·0452729	21	5·0906098	6·0010671	21	5·0603717	5·9546771
22	5·1089513	6·0346690	22	5·0804982	5·9904854	22	5·0502601	5·9441173
23	5·0987620	6·0239768	23	5·0703089	5·9798155	23	5·0400708	5·9334701
24	5·0884968	6·0131920	24	5·0600437	5·9690556	24	5·0298056	5·9227327
25	5·0781567	6·0023109	25	5·0497036	5·9582006	25	5·0194655	5·9119030
26	5·0677418	5·9913298	26	5·0392887	5·9472464	26	5·0090506	5·9009758
27	5·0572514	5·9802421	27	5·0287983	5·9361889	27	4·9985602	5·8899458
28	5·0466839	5·9690421	28	5·0182308	5·9250201	28	4·9879927	5·8788075
29	5·0360371	5·9577227	29	5·0075840	5·9137344	29	4·9773459	5·8675540
30	5·0253077	5·9462754	30	4·9968546	5·9023232	30	4·9666165	5·8561778
31	5·0144917	5·9346918	31	4·9860386	5·8907783	31	4·9558005	5·8446699
32	5·0035842	5·9229620	32	4·9751311	5·8790898	32	4·9448930	5·8330215
33	4·9925795	5·9110747	33	4·9641264	5·8672474	33	4·9338883	5·8212219
34	4·9814711	5·8990189	34	4·9530180	5·8552394	34	4·9227799	5·8092600
35	4·9702516	5·8867813	35	4·9417985	5·8430536	35	4·9115604	5·7971234
36	4·9589128	5·8743484	36	4·9304597	5·8306758	36	4·9002216	5·7847988
37	4·9474456	5·8617051	37	4·9189925	5·8180919	37	4·8887544	5·7722718
38	4·9358402	5·8488354	38	4·9073871	5·8052856	38	4·8771490	5·7595268
39	4·9240858	5·8357215	39	4·8956327	5·7922402	39	4·8653946	5·7465470
40	4·9121710	5·8223443	40	4·8837179	5·7789367	40	4·8534798	5·7333143
41	4·9000833	5·8086836	41	4·8716302	5·7653549	41	4·8413921	5·7198085
42	4·8878095	5·7947174	42	4·8593564	5·7514731	42	4·8291183	5·7060084
43	4·8753355	5·7804214	43	4·8468824	5·7372682	43	4·8166443	5·6918907
44	4·8626466	5·7657694	44	4·8341935	5·7227138	44	4·8039554	5·6774306
45	4·8497269	5·7507333	45	4·8212738	5·7077822	45	4·7910357	5·6626000
46	4·8365599	5·7352817	46	4·8081068	5·6924428	46	4·7778687	5·6473689
47	4·8231282	5·7193809	47	4·7946751	5·6766622	47	4·7644370	5·6317044
48	4·8094136	5·7029935	48	4·7809605	5·6604034	48	4·7507224	5·6155702
49	4·7953970	5·6860780	49	4·7669439	5·6436258	49	4·7367058	5·5989257
50	4·7810586	5·6685903	50	4·7526055	5·6262841	50	4·7223674	5·5817266
51	4·7663776	5·6504793	51	4·7379245	5·6083294	51	4·7076864	5·5639231
52	4·7510879	5·6316894	52	4·7226348	5·5897056	52	4·6923967	5·5454608
53	4·7353534	5·6121945	53	4·7069003	5·5703876	53	4·6766622	5·5263152
54	4·7191568	5·5919383	54	4·6907037	5·5503196	54	4·6604656	5·5064314

JOINT LIVES :—TWO MALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	66			67			68	
Age of (x)	$\lambda\, D_{x,\,66}$	$\lambda\, N_{x,\,66}$	**Age** of (x)	$\lambda\, D_{x,\,67}$	$\lambda\, N_{x,\,67}$	**Age** of (x)	$\lambda\, D_{x,\,68}$	$\lambda\, N_{x,\,68}$
55	4·7024709	5·5708570	55	4·6740178	5·5294387	55	4·6437797	5·4857459
56	4·6852580	5·5488797	56	4·6568049	5·5076731	56	4·6265668	5·4641889
57	4·6674700	5·5259273	57	4·6390169	5·4849447	57	4·6087788	5·4416805
58	4·6490185	5·5019151	58	4·6205954	5·4611677	58	4·5903573	5·4181360
59	4·6299249	5·4767504	59	4·6014718	5·4362497	59	4·5712337	5·3934621
60	4·6100201	5·4503343	60	4·5815670	5·4100908	60	4·5513289	5·3675587
61	4·5892448	5·4225599	61	4·5607917	5·3825850	61	4·5305536	5·3403190
62	4·5674993	5·3933165	62	4·5390462	5·3536179	62	4·5088081	5·3116294
63	4·5446736	5·3624840	63	4·5162205	5·3230713	63	4·4859824	5·2813682
64	4·5206474	5·3299362	64	4·4921943	5·2908178	64	4·4619562	5·2494092
65	4·4952900	5·2955425	65	4·4668369	5·2567232	65	4·4365988	5·2156177
66	4·4684604	5·2591623	66	4·4400073	5·2206490	66	4·4097692	5·1798516
67	4·4400073	5·2206496	67	4·4115542	5·1824481	67	4·3813161	5·1419646
68	4·4097692	5·1798516	68	4·3813161	5·1419646	68	4·3510780	5·1018007
69	4·3775739	5·1366099	69	4·3491208	5·0990384	69	4·3188527	5·0591968
70	4·3432393	5·0907549	70	4·3147862	5·0535025	70	4·2845481	5·0139834
71	4·3065727	5·0421123	71	4·2781196	5·0051784	71	4·2478815	4·9659859
72	4·2673711	4·9905005	72	4·2389180	4·9538829	72	4·2086799	4·9150155
73	4·2254214	4·9357269	73	4·1969683	4·8994260	73	4·1667302	4·8608810
74	4·1804998	4·8775931	74	4·1520467	4·8416054	74	4·1218086	4·8033834
75	4·1323725	4·8158917	75	4·1039194	4·7802129	75	4·0736813	4·7423103
76	4·0807951	4·7504066	76	4·0523420	4·7150318	76	4·0221039	4·6774436
77	4·0255132	4·6809109	77	3·9970601	4·6458354	77	3·9668220	4·6085574
78	3·9662618	4·6071695	78	3·9378087	4·5723880	78	3·9075706	4·5354148
79	3·9027657	4·5289390	79	3·8743126	4·4944443	79	3·8410745	4·4577696
80	3·8347393	4·4459645	80	3·8062862	4·4117495	80	3·7760481	4·3753661
81	3·7618867	4·3579803	81	3·7334336	4·3240383	81	3·7031955	4·2879391
82	3·6839016	4·2647130	82	3·6554185	4·2310346	82	3·6252104	4·1952128
83	3·6004677	4·1658759	83	3·5720146	4·1324540	83	3·5417765	4·0969000
84	3·5112579	4·0611734	84	3·4828048	4·0279987	84	3·4525667	3·9927055
85	3·4159351	3·9502977	85	3·3874820	3·9173626	85	3·3572439	3·8823202
86	3·3141517	3·8329308	86	3·2856986	3·8002261	86	3·2554605	3·7654271
87	3·2055499	3·7087446	87	3·1770968	3·6762600	87	3·1468587	3·6416952
88	3·0897615	3·5773953	88	3·0613084	3·5451252	88	3·0310703	3·5107835
89	2·9664081	3·4385322	89	2·9379550	3·4064662	89	2·9077169	3·3723425
90	2·8351006	3·2917916	90	2·8066475	3·2599208	90	2·7764094	3·2260049
91	2·6954401	3·1367964	91	2·6669870	3·1051131	91	2·6367489	3·0713959
92	2·5470170	2·9731565	92	2·5185639	2·9416535	92	2·4883258	2·9081278
93	2·3894115	2·8004696	93	2·3609584	2·7691387	93	2·3307203	2·7357968
94	2·2221934	2·6183180	94	2·1937403	2·5871517	94	2·1635022	2·5539849
95	2·0449223	2·4262607	95	2·0164692	2·3952548	95	1·9862311	2·3622581
96	1·8571474	2·2238312	96	1·8286943	2·1929798	96	1·7984562	2·1601491
97	1·6584075	2·0105183	97	1·6299544	1·9798210	97	1·5997163	1·9471527
98	1·4482312	1·7857362	98	1·4197781	1·7551886	98	1·3895400	1·7226866
99	1·2261368	1·5487395	99	1·1976837	1·5183534	99	1·1674456	1.4860166
100	0·9916320	1·2984754	100	0·9631789	1·2682620	100	0·9329408	1·2361138
101	0·7442145	1·0331904	101	0·7157614	1·0031804	101	0·6855233	0·9712480
102	0·4833715	0·7495276	102	0·4549184	0·7197621	102	0·4246803	0·6880993
103	0·2085799	0·4400112	103	0·1801268	0·4105748	103	0·1498887	0·3792511
104	9·9193063	0·0850764	104	9·8908532	0·0560659	104	9·8606151	0·0252239
105	9·6150069		105	9·5865538		105	9·5563157	
106	9·2951277		106	9·2666746		106	9·2364365	
107	8·9591043		107	8·9306512		107	8·9004131	
108	8·6063620		108	8·5779089		108	8·5476708	
109	8·2363157		109	8·2078626		109	8·1776245	

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	69		70			71		
Age of (x)	$\lambda\ D_{x,69}$	$\lambda\ N_{x,69}$	Age of (x)	$\lambda\ D_{x,70}$	$\lambda\ N_{x,70}$	Age of (x)	$\lambda\ D_{x,71}$	$\lambda\ N_{x,71}$
0	5·3523975	6·1373984	0	5·3180629	6·0869849	0	5·2813963	6·0339812
1	5·2683953	6·1105961	1	5·2340607	6·0595744	1	5·1973941	6·0059339
2	5·2331144	6·0944233	2	5·1987798	6·0431646	2	5·1621132	5·9892758
3	5·2110011	6·0815057	3	5·1766665	6·0301203	3	5·1399999	5·9760986
4	5·1940994	6·0701159	4	5·1597648	6·0186527	4	5·1230982	5·9645505
5	5·1798720	6·0596225	5	5·1455374	6·0081145	5	5·1088708	5·9539620
6	5·1675108	6·0497237	6	5·1331762	5·9981913	6	5·0965096	5·9440136
7	5·1563673	6·0402062	7	5·1220327	5·9886660	7	5·0853661	5·9344773
8	5·1459531	6·0309294	8	5·1116185	5·9793931	8	5·0749519	5·9252069
9	5·1362057	6·0218089	9	5·1018711	5·9702869	9	5·0652045	5·9161132
10	5·1269705	6·0127609	10	5·0926359	5·9612602	10	5·0559693	5·9071076
11	5·1181060	6·0037139	11	5·0837714	5·9522401	11	5·0471048	5·8981134
12	5·1094840	5·9946093	12	5·0751494	5·9431659	12	5·0384828	5·8890691
13	5·1009895	5·9854009	13	5·0666549	5·9339891	13	5·0299883	5·8799241
14	5·0925206	5·9760532	14	5·0581860	5·9246736	14	5·0215194	5·8706403
15	5·0839888	5·9665434	15	5·0496542	5·9151940	15	5·0129876	5·8611914
16	5·0753185	5·9568573	16	5·0409839	5·9055368	16	5·0043173	5·8515623
17	5·0664477	5·9469918	17	5·0321131	5·8956976	17	4·9954465	5·8417492
18	5·0573272	5·9369518	18	5·0229926	5·8856812	18	4·9863260	5·8317563
19	5·0479214	5·9267514	19	5·0135868	5·8755017	19	4·9769202	5·8215979
20	5·0382076	5·9164108	20	5·0038730	5·8651804	20	4·9672064	5·8112955
21	5·0281764	5·9059555	21	4·9938418	5·8547442	21	4·9571752	5·8008774
22	5·0180648	5·8954154	22	4·9837302	5·8442240	22	4·9470636	5·7903764
23	5·0078755	5·8847903	23	4·9735409	5·8336190	23	4·9368743	5·7797910
24	4·9976103	5·8740756	24	4·9632757	5·8229265	24	4·9266091	5·7691194
25	4·9872702	5·8632695	25	4·9529356	5·8121435	25	4·9162690	5·7583584
26	4·9768553	5·8523678	26	4·9425207	5·8012658	26	4·9058541	5·7475043
27	4·9663649	5·8413651	27	4·9320303	5·7902891	27	4·8953637	5·7365525
28	4·9557974	5·8302557	28	4·9214628	5·7792077	28	4·8847962	5·7254976
29	4·9451506	5·8190333	29	4·9108160	5·7680149	29	4·8741494	5·7143334
30	4·9344212	5·8076902	30	4·9000866	5·7567038	30	4·8634200	5·7030525
31	4·9236052	5·7962183	31	4·8892706	5·7452659	31	4·8526040	5·6916475
32	4·9126977	5·7846080	32	4·8783631	5·7336925	32	4·8416965	5·6801091
33	4·9016930	5·7728496	33	4·8673584	5·7219732	33	4·8306918	5·6684277
34	4·8905846	5·7609317	34	4·8562500	5·7100977	34	4·8195834	5·6565926
35	4·8793651	5·7488425	35	4·8450305	5·6980538	35	4·8083639	5·6445922
36	4·8680263	5·7365688	36	4·8336917	5·6858291	36	4·7970251	5·6324140
37	4·8565591	5·7240966	37	4·8222245	5·6734092	37	4·7855579	5·6200445
38	4·8449537	5·7114103	38	4·8106191	5·6607795	38	4·7739525	5·6074687
39	4·8331993	5·6984937	39	4·7988647	5·6479234	39	4·7621981	5·5946707
40	4·8212845	5·6853286	40	4·7869499	5·6348234	40	4·7502833	5·5816331
41	4·8091968	5·6718960	41	4·7748622	5·6214607	41	4·7381956	5·5683375
42	4·7969230	5·6581745	42	4·7625884	5·6078146	42	4·7259218	5·5547636
43	4·7844490	5·6441411	43	4·7501144	5·5938625	43	4·7134178	5·5408892
44	4·7717601	5·6297713	44	4·7374255	5·5795797	44	4·7007589	5·5266902
45	4·7588404	5·6150383	45	4·7245058	5·5649399	45	4·6878392	5·5121403
46	4·7456734	5·5999115	46	4·7113388	5·5499141	46	4·6746722	5·4972107
47	4·7322417	5·5843591	47	4·6979071	5·5344695	47	4·6612405	5·4818705
48	4·7185271	5·5683449	48	4·6841925	5·5185712	48	4·6475259	5·4660837
49	4·7045105	5·5518293	49	4·6701759	5·5021797	49	4·6335093	5·4498118
50	4·6901721	5·5347680	50	4·6558375	5·4852515	50	4·6191709	5·4330116
51	4·6754911	5·5171118	51	4·6411565	5·4677375	51	4·6044899	5·4156348
52	4·6602014	5·4988053	52	4·6258668	5·4495827	52	4·5892002	5·3976262
53	4·6444669	5·4798276	53	4·6101323	5·4307668	53	4·5734657	5·3789676
54	4·6282703	5·4601229	54	4·5939357	5·4112365	54	4·5572691	5·3596053

JOINT LIVES:—Two Males.

Logarithms of the Series $D_{x,\ y}$ and $N_{x,\ y}$.

Age of ( )	69			70			71	
Age of (x)	$\lambda\ D_{x,\ 69}$	$\lambda\ N_{x,\ 69}$	Age of (x)	$\lambda\ D_{x,\ 70}$	$\lambda\ N_{x,\ 70}$	Age of (x)	$\lambda\ D_{x,\ 71}$	$\lambda\ N_{x,\ 71}$
55	4·6115844	5·4396290	55	4·5772498	5·3909288	55	4·5405832	5·3394787
56	4·5943715	5·4182750	56	4·5600369	5·3697738	56	4·5233703	5·3185172
57	4·5765835	5·3959834	57	4·5422489	5·3476931	57	4·5055823	5·2966431
58	4·5581620	5·3726674	58	4·5238274	5·3246018	58	4·4871608	5·2737705
59	4·5390384	5·3482344	59	4·5047038	5·3004055	59	4·4680372	5·2498072
60	4·5191336	5·3225837	60	4·4847990	5·2750043	60	4·4481324	5·2246509
61	4·4983583	5·2956082	61	4·4640237	5·2482902	61	4·4273571	5·1981943
62	4·4766128	5·2671936	62	4·4422782	5·2201478	62	4·4056116	5·1703216
63	4·4537871	5·2372184	63	4·4194525	5·1904561	63	4·3827859	5·1409104
64	4·4297609	5·2055532	64	4·3954263	5·1590854	64	4·3587597	5·1098312
65	4·4044035	5·1720648	65	4·3700689	5·1258988	65	4·3334023	5·0769469
66	4·3775739	5·1366099	66	4·3432393	5·0907549	66	4·3065727	5·0421123
67	4·3491208	5·0990384	67	4·3147862	5·0535025	67	4·2781196	5·0051784
68	4·3188827	5·0591968	68	4·2845481	5·0139834	68	4·2478815	4·9659859
69	4·2866874	5·0169193	69	4·2523528	4·9720356	69	4·2156862	4·9243672
70	4·2523528	4·9720356	70	4·2180182	4·9274853	70	4·1813516	4·8801531
71	4·2156862	4·9243672	71	4·1813516	4·8801531	71	4·1446850	4·8331605
72	4·1764846	4·8737303	72	4·1421500	4·8298516	72	4·1054834	4·7832008
73	4·1345349	4·8199274	73	4·1002003	4·7763881	73	4·0635337	4·7300786
74	4·0896133	4·7627581	74	4·0552787	4·7195558	74	4·0186121	4·6735904
75	4·0414860	4·7020133	75	4·0071514	4·6591448	75	3·9704848	4·6135217
76	3·9899086	4·6374714	76	3·9555740	4·5949362	76	3·9189074	4·5496523
77	3·9346267	4·5689054	77	3·9002921	4·5266991	77	3·8636255	4·4817520
78	3·8753753	4·4960774	78	3·8410407	4·4541961	78	3·8043741	4·4095818
79	3·8118792	4·4187416	79	3·7775446	4·3771789	79	3·7408780	4·3328937
80	3·7438528	4·3366410	80	3·7095182	4·2953918	80	3·6728516	4·2514287
81	3·6710002	4·2495097	81	3·6366656	4·2085671	81	3·5999990	4·1649207
82	3·5930151	4·1570715	82	3·5586805	4·1164281	82	3·5220139	4·0730916
83	3·5095812	4·0590398	83	3·4752466	4·0186884	83	3·4385800	3·9756532
84	3·4203714	3·9551165	84	3·3860368	3·9150493	84	3·3493702	3·8723095
85	3·3250486	3·8449957	85	3·2907140	3·8052024	85	3·2540474	3·7627499
86	3·2232652	3·7283562	86	3·1889306	3·6888308	86	3·1522640	3·6466546
87	3·1146634	3·6048716	87	3·0803288	3·5656023	87	3·0436622	3·5236958
88	2·9988750	3·4741976	88	2·9645404	3·4351782	88	2·9278738	3·3935316
89	2·8755216	3·3359839	89	2·8411870	3·2972043	89	2·8045204	3·2558088
90	2·7442141	3·1898658	90	2·7098795	3·1513174	90	2·6732129	3·1101636
91	2·6045536	3·0354678	91	2·5702190	2·9971412	91	2·5335524	2·9562213
92	2·4561305	2·8724010	92	2·4217959	2·8342885	92	2·3851293	2·7935920
93	2·2985250	2·7002657	93	2·2641904	2·6623564	93	2·2275238	2·6218770
94	2·1313069	2·5186416	94	2·0969723	2·4809321	94	2·0603057	2·4406588
95	1·9540358	2·3270940	95	1·9197012	2·2895754	95	1·8830346	2·2495056
96	1·7662609	2·1251614	96	1·7319263	2·0878283	96	1·6952597	2·0479548
97	1·5675210	1·9123379	97	1·5331864	1·8751892	97	1·4965198	1·8355086
98	1·3573447	1·6880459	98	1·3230101	1·6510812	98	1·2863135	1·6115980
99	1·1352503	1·4515608	99	1·1009157	1·4147896	99	1·0642491	1·3755063
100	0·9007455	1·2018476	100	0·8664109	1·1652918	100	0·8297443	1·1262353
101	0·6533280	0·9372169	101	0·6189934	0·9008912	101	0·5823268	0·8621016
102	0·3924850	0·6543498	102	0·3581504	0·6183410	102	0·3214838	0·5798522
103	0·1176934	0·3458832	103	0·0833588	0·3102684	103	0·0466922	0·2722362
104	9·8284198	$\bar{1}$·9923326	104	9·7940852	$\bar{1}$·9572720	104	9·7574186	$\bar{1}$·9198100
105	9·5241204		105	9·4897858		105	9·4531192	
106	9·2042412		106	9·1699066		106	9·1332400	
107	8·8682178		107	8·8338832		107	8·7972166	
108	8·5154755		108	8·4811409		108	8·4444743	
109	8·1454292		109	8·1110946		109	8·0744280	

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	72			73			74	
Age of (x)	$\lambda\ D_{x,\,72}$	$\lambda\ N_{x,\,72}$	Age of (x)	$\lambda\ D_{x,\,73}$	$\lambda\ N_{x,\,73}$	Age of (x)	$\lambda\ D_{x,\,74}$	$\lambda\ N_{x,\,74}$
0	5·2421947	5·9782102	0	5·2002450	5·9194897	0	5·1553234	5·8576250
1	5·1581935	5·9495007	1	5·1162428	5·8900883	1	5·0713212	5·8275037
2	5·1229116	5·9325834	2	5·0809619	5·8729035	2	5·0360403	5·8100409
3	5·1007983	5·9192664	3	5·0588486	5·8594409	3	5·0139270	5·7964286
4	5·0838966	5·9076338	4	5·0419469	5·8477182	4	4·9970253	5·7846124
5	5·0696692	5·8969933	5	5·0277195	5·8370225	5	4·9827979	5·7738568
6	5·0573080	5·8870143	6	5·0153583	5·8270124	6	4·9704367	5·7638119
7	5·0461645	5·8774664	7	5·0042148	5·8174484	7	4·9592932	5·7542318
8	5·0357503	5·8681958	8	4·9938006	5·8081770	8	4·9488790	5·7449562
9	5·0260029	5·8591137	9	4·9840532	5·7991041	9	4·9391316	5·7358918
10	5·0167677	5·8501271	10	4·9748180	5·7901363	10	4·9298964	5·7269410
11	5·0079032	5·8411592	11	4·9659535	5·7811930	11	4·9210319	5·7180215
12	4·9992812	5·8321441	12	4·9573315	5·7722069	12	4·9124099	5·7090640
13	4·9907867	5·8230305	13	4·9488370	5·7631242	13	4·9039154	5·7000121
14	4·9823178	5·8137784	14	4·9403681	5·7539038	14	4·8954465	5·6908229
15	4·9737860	5·8043603	15	4·9318363	5·7445165	15	4·8869147	5·6814662
16	4·9651157	5·7947600	16	4·9231660	5·7349449	16	4·8782444	5·6719233
17	4·9562449	5·7849726	17	4·9142952	5·7251834	17	4·8693736	5·6621877
18	4·9471244	5·7750028	18	4·9051747	5·7152364	18	4·8602531	5·6522635
19	4·9377186	5·7648649	19	4·8957689	5·7051185	19	4·8508473	5·6421652
20	4·9280048	5·7545809	20	4·8860551	5·6948527	20	4·8411335	5·6319168
21	4·9179736	5·7441804	21	4·8760239	5·6844688	21	4·8311023	5·6215495
22	4·9078620	5·7336975	22	4·8659123	5·6740035	22	4·8209907	5·6111008
23	4·8976727	5·7231314	23	4·8557230	5·6634556	23	4·8108014	5·6005703
24	4·8874075	5·7124796	24	4·8454578	5·6528232	24	4·8005362	5·5899562
25	4·8770674	5·7017398	25	4·8351177	5·6421035	25	4·7901961	5·5792562
26	4·8666525	5·6909082	26	4·8247028	5·6312933	26	4·7797812	5·5684664
27	4·8561621	5·6799803	27	4·8142124	5·6203883	27	4·7692908	5·5575831
28	4·8455946	5·6689507	28	4·8036449	5·6093831	28	4·7587233	5·5466013
29	4·8349478	5·6578137	29	4·7929981	5·5982720	29	4·7480765	5·5355152
30	4·8242184	5·6465623	30	4·7822687	5·5870484	30	4·7373471	5·5243178
31	4·8134024	5·6351882	31	4·7714527	5·5757045	31	4·7265311	5·5130022
32	4·8024949	5·6236834	32	4·7605452	5·5642315	32	4·7156236	5·5015602
33	4·7914902	5·6120379	33	4·7495405	5·5526206	33	4·7046189	5·4899819
34	4·7803818	5·6002417	34	4·7384321	5·5408611	34	4·6935105	5·4782577
35	4·7691623	5·5882828	35	4·7272126	5·5289421	35	4·6822910	5·4663765
36	4·7578235	5·5761495	36	4·7158738	5·5168513	36	4·6709522	5·4543267
37	4·7463563	5·5638277	37	4·7044066	5·5045756	37	4·6594850	5·4420947
38	4·7347509	5·5513037	38	4·6928012	5·4921007	38	4·6478796	5·4296672
39	4·7229965	5·5385612	39	4·6810468	5·4794114	39	4·6361252	5·4170283
40	4·7110817	5·5255835	40	4·6691320	5·4664908	40	4·6242104	5·4041624
41	4·6989940	5·5123521	41	4·6570443	5·4533210	41	4·6121227	5·3910513
42	4·6867202	5·4988472	42	4·6447705	5·4398822	42	4·5998489	5·3776759
43	4·6742462	5·4850474	43	4·6322965	5·4261535	43	4·5873749	5·3640150
44	4·6615573	5·4709286	44	4·6196076	5·4121115	44	4·5746860	5·3500463
45	4·6486376	5·4564650	45	4·6066879	5·3977308	45	4·5617663	5·3357446
46	4·6354706	5·4416284	46	4·5935209	5·3829832	46	4·5485993	5·3210827
47	4·6220389	5·4263875	47	4·5800892	5·3678381	47	4·5351676	5·3060292
48	4·6083243	5·4107083	48	4·5663746	5·3522612	48	4·5214530	5·2905512
49	4·5943077	5·3945515	49	4·5523580	5·3362155	49	4·5074364	5·2746106
50	4·5799693	5·3778746	50	4·5380196	5·3196571	50	4·4930980	5·2581666
51	4·5652883	5·3606294	51	4·5233386	5·3025386	51	4·4784170	5·2411698
52	4·5499986	5·3427619	52	4·5080489	5·2848060	52	4·4631273	5·2235668
53	4·5342641	5·3242547	53	4·4923144	5·2664451	53	4·4473928	5·2053454
54	4·5180675	5·3050557	54	4·4761178	5·2474032	54	4·4311962	5·1864551

JOINT LIVES:—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	72			73			74	
Age of (x)	λ $D_{x,\,72}$	λ $N_{x,\,72}$	Age of (x)	λ $D_{x,\,73}$	λ $N_{x,\,73}$	Age of (x)	λ $D_{x,\,74}$	λ $N_{x,\,74}$
55	4·5013816	5·2851036	55	4·4594319	5·2276203	55	4·4145103	5·1668355
56	4·4841687	5·2643299	56	4·4422190	5·2070282	56	4·3972974	5·1464189
57	4·4663807	5·2426567	57	4·4244310	5·1855496	57	4·3795094	5·1251286
58	4·4479592	5·2199982	58	4·4060095	5·1630993	58	4·3610879	5·1028801
59	4·4288356	5·1962613	59	4·3868859	5·1395842	59	4·3419643	5·0795803
60	4·4089308	5·1713461	60	4·3669811	5·1149028	60	4·3220595	5·0551282
61	4·3881555	5·1451423	61	4·3462058	5·0889479	61	4·3012842	5·0294146
62	4·3664100	5·1175354	62	4·3244603	5·0616013	62	4·2795387	5·0023246
63	4·3435843	5·0884016	63	4·3016346	5·0327412	63	4·2567130	4·9737322
64	4·3195581	5·0576106	64	4·2776084	5·0022352	64	4·2326868	4·9435069
65	4·2942007	5·0250256	65	4·2522510	4·9699454	65	4·2073294	4·9115092
66	4·2673711	4·9905005	66	4·2254214	4·9357269	66	4·1804998	4·8775931
67	4·2389180	4·9538829	67	4·1969683	4·8994260	67	4·1520467	4·8416054
68	4·2086799	4·9150155	68	4·1667302	4·8608810	68	4·1218086	4·8033834
69	4·1764846	4·8737303	69	4·1345349	4·8199274	69	4·0896133	4·7627581
70	4·1421500	4·8298516	70	4·1002003	4·7763881	70	4·0552787	4·7195558
71	4·1054834	4·7832008	71	4·0635337	4·7300786	71	4·0186121	4·6735904
72	4·0662818	4·7335864	72	4·0243321	4·6808113	72	3·9794105	4·6246699
73	4·0243321	4·6808113	73	3·9823824	4·6283854	73	3·9374608	4·5725956
74	3·9794105	4·6246699	74	3·9374608	4·5725956	74	3·8925392	4·5171589
75	3·9312832	4·5649489	75	3·8893335	4·5132261	75	3·8444119	4·4581448
76	3·8797058	4·5014256	76	3·8377561	4·4500541	76	3·7928345	4·3953276
77	3·8244239	4·4338690	77	3·7824742	4·3828472	77	3·7375526	4·3284750
78	3·7651725	4·3620393	78	3·7232228	4·3113643	78	3·6783012	4·2573447
79	3·7016764	4·2856874	79	3·6597267	4·2353557	79	3·6148051	4·1816852
80	3·6336500	4·2045546	80	3·5917003	4·1545615	80	3·5467787	4·1012365
81	3·5607974	4·1183715	81	3·5188477	4·0687133	81	3·4739261	4·0157289
82	3·4828123	4·0268616	82	3·4408626	3·9775307	82	3·3959410	3·9248828
83	3·3993784	3·9297361	83	3·3574287	3·8807262	83	3·3125071	3·8284072
84	3·3101686	3·8266953	84	3·2682189	3·7780007	84	3·2232973	3·7260039
85	3·2148458	3·7174334	85	3·1728961	3·6690425	85	3·1279745	3·6173621
86	3·1130624	3·6016277	86	3·0711127	3·5535359	86	3·0261911	3·5021608
87	3·0044606	3·4789473	87	2·9625109	3·4311464	87	2·9175893	3·3800712
88	2·8886722	3·3490539	88	2·8467225	3·3015334	88	2·8018009	3·2507493
89	2·7653188	3·2115930	89	2·7233691	3·1643443	89	2·6784475	3·1138421
90	2·6340113	3·0662011	90	2·5920616	3·0192156	90	2·5471400	2·9689856
91	2·4943508	2·9125021	91	2·4524011	2·8657712	91	2·4074795	2·8158055
92	2·3459277	2·7501094	92	2·3039780	2·7036232	92	2·2590564	2·6539126
93	2·1883222	2·5786198	93	2·1463725	2·5323721	93	2·1014509	2·4829079
94	2·0211041	2·3976202	94	1·9791544	2·3516014	94	1·9342328	2·3023757
95	1·8438330	2·2066786	95	1·8018833	2·1608801	95	1·7569617	2·1118859
96	1·6560581	2·0053346	96	1·6141084	1·9597519	96	1·5691868	1·9109833
97	1·4573182	1·7930916	97	1·4153685	1·7477233	97	1·3704469	1·6991767
98	1·2471419	1·5693844	98	1·2051922	1·5242299	98	1·1602707	1·4759093
99	1·0250475	1·3335117	99	0·9830978	1·2885800	99	0·9381762	1·2404918
100	0·7905427	1·0844690	100	0·7485930	1·0397908	100	0·7036714	0·9919567
101	0·5431252	0·8206152	101	0·5011755	0·7762143	101	0·4562539	0·7287027
102	0·2822822	0·5387245	102	0·2403325	0·4946971	102	0·1954109	0·4475456
103	0·0074906	0·2315206	103	9·9655409	0·1879999	103	9·9206193	0·1413871
104	9·7182170	$\bar{1}$·8797838	104	9·6762673	$\bar{1}$·8368303	104	9·6313457	$\bar{1}$·7909885
105	9·4139176		105	9·3719679		105	9·3270463	
106	9·0940384		106	9·0520887		106	9·0071671	
107	8·7580150		107	8·7160653		107	8·6711437	
108	8·4052727		108	8·3633230		108	8·3184014	
109	8·0352264		109	7·9932767		109	7·9483551	

JOINT LIVES :—TWO MALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	75			76			77	
Age of (x)	λ $D_{x,\,75}$	λ $N_{x,\,75}$	Age of (x)	λ $D_{x,\,76}$	λ $N_{x,\,76}$	Age of (x)	λ $D_{x,\,77}$	λ $N_{x,\,77}$
0	5·1071961	5·7924113	0	5·0556187	5·7236346	0	5·0003368	5·6510705
1	5·0231939	5·7615437	1	4·9716165	5·6919930	1	4·9163346	5·6186283
2	4·9879130	5·7437922	2	4·9363356	5·6739446	2	4·8810537	5·6002737
3	4·9657997	5·7300241	3	4·9142223	5·6600162	3	4·8589404	5·5861801
4	4·9488980	5·7181117	4	4·8973206	5·6480031	4	4·8420387	5·5740637
5	4·9346706	5·7072941	5	4·8830932	5·6371207	5	4·8278113	5·5631132
6	4·9223094	5·6972117	6	4·8707320	5·6269987	6	4·8154501	5·5529496
7	4·9111659	5·6876124	7	4·8595885	5·6173778	7	4·8043066	5·5433051
8	4·9007517	5·6783315	8	4·8491743	5·6080893	8	4·7938924	5·5340071
9	4·8910043	5·6692732	9	4·8394269	5·5990361	9	4·7841450	5·5249565
10	4·8817691	5·6603385	10	4·8301917	5·5901155	10	4·7749098	5·5160494
11	4·8729046	5·6514418	11	4·8213272	5·5812408	11	4·7660153	5·5071952
12	4·8642826	5·6425117	12	4·8127052	5·5723377	12	4·7574233	5·4983183
13	4·8557881	5·6334906	13	4·8042107	5·5633460	13	4·7489288	5·4893561
14	4·8473192	5·6243325	14	4·7957418	5·5542195	14	4·7404599	5·4802595
15	4·8387874	5·6150062	15	4·7872100	5·5449234	15	4·7319281	5·4709944
16	4·8301171	5·6054919	16	4·7785397	5·5354375	16	4·7232578	5·4615365
17	4·8212463	5·5957820	17	4·7696689	5·5257533	17	4·7143570	5·4518778
18	4·8121258	5·5858805	18	4·7605484	5·5158741	18	4·7052665	5·4420210
19	4·8027200	5·5758018	19	4·7511426	5·5058146	19	4·6958607	5·4319802
20	4·7930062	5·5655701	20	4·7414288	5·4955995	20	4·6861169	5·4217812
21	4·7829750	5·5552184	21	4·7313976	5·4852627	21	4·6761157	5·4114591
22	4·7728634	5·5447862	22	4·7212860	5·4748460	22	4·6660041	5·4010569
23	4·7626741	5·5342724	23	4·7110967	5·4643485	23	4·6558148	5·3905748
24	4·7524089	5·5236757	24	4·7008315	5·4537686	24	4·6455196	5·3800112
25	4·7420688	5·5129941	25	4·6904914	5·4431045	25	4·6352095	5·3693640
26	4·7316539	5·5022242	26	4·6800765	5·4323530	26	4·6247946	5·3586304
27	4·7211635	5·4913616	27	4·6695861	5·4215107	27	4·6143042	5·3478066
28	4·7105960	5·4804020	28	4·6590186	5·4105721	28	4·6037307	5·3368884
29	4·6999492	5·4693396	29	4·6483718	5·3995322	29	4·5930899	5·3258701
30	4·6892198	5·4581678	30	4·6376424	5·3883847	30	4·5823605	5·3147455
31	4·6784038	5·4468793	31	4·6268264	5·3771222	31	4·5715445	5·3035077
32	4·6674963	5·4354661	32	4·6159189	5·3657367	32	4·5606370	5·2921488
33	4·6564916	5·4239194	33	4·6049142	5·3542196	33	4·5496323	5·2806601
34	4·6453832	5·4122287	34	4·5938058	5·3425612	34	4·5385239	5·2690322
35	4·6341637	5·4003837	35	4·5825863	5·3307505	35	4·5273044	5·2572544
36	4·6228249	5·3883724	36	4·5712475	5·3187765	36	4·5159656	5·2453152
37	4·6113577	5·3761826	37	4·5597803	5·3066259	37	4·5044984	5·2332027
38	4·5997523	5·3637995	38	4·5481749	5·2942863	38	4·4928930	5·2209035
39	4·5879979	5·3512096	39	4·5364205	5·2817418	39	4·4811386	5·2084035
40	4·5760831	5·3383953	40	4·5245057	5·2689777	40	4·4692238	5·1956857
41	4·5639954	5·3253405	41	4·5124180	5·2559757	41	4·4571361	5·1827355
42	4·5517216	5·3120254	42	4·5001442	5·2427185	42	4·4448623	5·1695325
43	4·5392476	5·2984297	43	4·4876702	5·2291848	43	4·4323883	5·1560582
44	4·5265587	5·2845309	44	4·4749813	5·2153531	44	4·4196994	5·1422902
45	4·5136390	5·2703047	45	4·4620616	5·2011988	45	4·4067797	5·1282050
46	4·5004720	5·2557240	46	4·4488946	5·1866959	46	4·3936127	5·1137760
47	4·4870403	5·2407589	47	4·4354629	5·1718142	47	4·3801810	5·0989745
48	4·4733257	5·2253752	48	4·4217483	5·1565216	48	4·3664064	5·0837673
49	4·4593091	5·2095364	49	4·4077317	5·1407798	49	4·3524198	5·0681194
50	4·4449707	5·1932004	50	4·3933933	5·1245482	50	4·3381114	5·0519871
51	4·4302897	5·1763208	51	4·3787123	5·1077793	51	4·3234304	5·0353252
52	4·4150000	5·1588424	52	4·3634226	5·0904203	52	4·3081407	5·0180786
53	4·3992655	5·1407550	53	4·3476881	5·0724617	53	4·2924062	5·0002435
54	4·3830689	5·1220094	54	4·3314915	5·0538549	54	4·2762096	4·9817697

JOINT LIVES:—TWO MALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	75		76			77		
Age of (x)	$\lambda\, D_{x,\,75}$	$\lambda\, N_{x,\,75}$	Age of (x)	$\lambda\, D_{x,\,76}$	$\lambda\, N_{x,\,76}$	Age of (x)	$\lambda\, D_{x,\,77}$	$\lambda\, N_{x,\,77}$
55	4·3663830	5·1025469	55	4·3148056	5·0345426	55	4·2595237	4·9626013
56	4·3491701	5·0822995	56	4·2975927	5·0144579	56	4·2423108	4·9426726
57	4·3313821	5·0611915	57	4·2798047	4·9935253	57	4·2245228	4·9219091
58	4·3129606	5·0391380	58	4·2613832	4·9716608	58	4·2061013	4·9002262
59	4·2938370	5·0160471	59	4·2422596	4·9487718	59	4·1869777	4·8775320
60	4·2739322	4·9918173	60	4·2223548	4·9247578	60	4·1670729	4·8537268
61	4·2531569	4·9663403	61	4·2015795	4·8995103	61	4·1462976	4·8287018
62	4·2314114	4·9394988	62	4·1798340	4·8729122	62	4·1245521	4·8023399
63	4·2085857	4·9111699	63	4·1570083	4·8448386	63	4·1017264	4·7745170
64	4·1845595	4·8812197	64	4·1329821	4·8151585	64	4·0777002	4·7450982
65	4·1592021	4·8495097	65	4·1076247	4·7837300	65	4·0523428	4·7139464
66	4·1323725	4·8158917	66	4·0807951	4·7504066	66	4·0255132	4·6809109
67	4·1039194	4·7802129	67	4·0523420	4·7150318	67	3·9970661	4·6458354
68	4·0730813	4·7423103	68	4·0221039	4·6774436	68	3·9668220	4·6085574
69	4·0414860	4·7020133	69	3·9899086	4·6374714	69	3·9346267	4·5689054
70	4·0071514	4·6591448	70	3·9555740	4·5949362	70	3·9002921	4·5266991
71	3·9704848	4·6135217	71	3·9189074	4·5496523	71	3·8636255	4·4817520
72	3·9312832	4·5649489	72	3·8797058	4·5014256	72	3·8214239	4·4338690
73	3·8893335	4·5132261	73	3·8377561	4·4500541	73	3·7824742	4·3828472
74	3·8444119	4·4581448	74	3·7928345	4·3953276	74	3·7375526	4·3284750
75	3·7962846	4·3994871	75	3·7447072	4·3370284	75	3·6894253	4·2705333
76	3·7447072	4·3370284	76	3·6931298	4·2749285	76	3·6378479	4·2087941
77	3·6894253	4·2705333	77	3·6378479	4·2087941	77	3·5825660	4·1430204
78	3·6301739	4·1997593	78	3·5785965	4·1383798	78	3·5233146	4·0729682
79	3·5666778	4·1244543	79	3·5151004	4·0634329	79	3·4598185	3·9983818
80	3·4986514	4·0443567	80	3·4470740	3·9836908	80	3·3917921	3·9189991
81	3·4257988	3·9591960	81	3·3742214	3·8988820	81	3·3189395	3·8345460
82	3·3478137	3·8686915	82	3·2962363	3·8087253	82	3·2409544	3·7447411
83	3·2643798	3·7725535	83	3·2128024	3·7129291	83	3·1575205	3·6492930
84	3·1751700	3·6704797	84	3·1235926	3·6111932	84	3·0683107	3·5478989
85	3·0798472	3·5621608	85	3·0282698	3·5032049	85	2·9729879	3·4402471
86	2·9780638	3·4472761	86	2·9264864	3·3886429	86	2·8712045	3·3260152
87	2·8694620	3·3254937	87	2·8178846	3·2671758	87	2·7626027	3·2048712
88	2·7536736	3·1964708	88	2·7020962	3·1384606	88	2·6468143	3·0764708
89	2·6303202	3·0598553	89	2·5787428	3·0021436	89	2·5234609	2·9404607
90	2·4990127	2·9152811	90	2·4474353	2·8578612	90	2·3921534	2·7964758
91	2·3593522	2·7623732	91	2·3077748	2·7052349	91	2·2524929	2·6441411
92	2·2109291	2·6007454	92	2·1593517	2·5438794	92	2·1040698	2·4830664
93	2·0533236	2·4299960	93	2·0017462	2·3733957	93	1·9464643	2·3128543
94	1·8861055	2·2497124	94	1·8345281	2·1933676	94	1·7792462	2·1330913
95	1·7088344	2·0594623	95	1·6572570	2·0033680	95	1·6019751	1·9433481
96	1·5210595	1·8587946	96	1·4694821	1·8029419	96	1·4142002	1·7431765
97	1·3223196	1·6472196	97	1·2707422	1·5916077	97	1·2154603	1·5320878
98	1·1121433	1·4241856	98	1·0605659	1·3688167	98	1·0052840	1·3095471
99	0·8900489	1·1890128	99	0·8384715	1·1338964	99	0·7831896	1·0748895
100	0·6555441	0·9407455	100	0·6039667	0·8859094	100	0·5486848	0·8271883
101	0·4081266	0·6777985	101	0·3565492	0·6232906	101	0·3012673	0·5649145
102	0·1472836	0·3970705	102	0·0957062	0·3429751	102	0·0404243	0·2850394
103	9·8724920	0·0914207	103	9·8209146	0·0379442	103	9·7656327	$\bar{1}$·9805942
104	9·5832184	$\bar{1}$·7417817	104	9·5316410	$\bar{1}$·6890423	104	9·4763591	$\bar{1}$·6326597
105	9·2789190		105	9·2273416		105	9·1720597	
106	8·9590398		106	8·9074624		106	8·8521805	
107	8·6230164		107	8·5714390		107	8·5161571	
108	8·2702741		108	8·2186967		108	8·1634148	
109	7·9002278		109	7·8486504		109	7·7933685	

JOINT LIVES :—TWO MALES.

Logarithms of the Series $D_{x, y}$ and $N_{x, y}$.

Age of (y)	78		79			80		
Age of (x)	λ $D_{x, 78}$	λ $N_{x, 78}$	Age of (x)	λ $D_{x, 79}$	λ $N_{x, 79}$	Age of (x)	λ $D_{x, 80}$	λ $N_{x, 80}$
0	4·9410854	5·5744813	0	4·8775893	5·4936228	0	4·8095629	5·4082366
1	4·8570832	5·5412143	1	4·7935871	5·4595048	1	4·7255607	5·3732437
2	4·8218023	5·5225454	2	4·7583062	5·4405138	2	4·6902798	5·3539232
3	4·7996890	5·5082822	3	4·7361929	5·4260775	3	4·6681665	5·3393101
4	4·7827873	5·4960591	4	4·7192912	5·4137449	4	4·6512648	5·3268660
5	4·7685599	5·4850388	5	4·7050638	5·4026521	5	4·6370374	5·3156983
6	4·7561987	5·4748304	6	4·6927026	5·3923979	6	4·6246762	5·3053961
7	4·7450552	5·4651606	7	4·6815591	5·3826999	7	4·6135327	5·2956691
8	4·7346410	5·4558511	8	4·6711449	5·3733775	8	4·6031185	5·2863309
9	4·7248936	5·4468017	9	4·6613975	5·3643275	9	4·5933711	5·2772792
10	4·7156584	5·4379060	10	4·6521623	5·3554420	10	4·5841359	5·2684020
11	4·7067939	5·4290716	11	4·6432978	5·3466256	11	4·5752714	5·2596028
12	4·6981719	5·4202198	12	4·6346758	5·3377982	12	4·5666494	5·2507982
13	4·6896774	5·4112863	13	4·6261813	5·3288924	13	4·5581549	5·2419202
14	4·6812085	5·4022203	14	4·6177124	5·3198563	14	4·5496860	5·2329128
15	4·6726767	5·3929842	15	4·6091806	5·3106502	15	4·5411542	5·2237363
16	4·6640064	5·3835556	16	4·6005103	5·3012486	16	4·5324839	5·2143629
17	4·6551356	5·3739219	17	4·5916395	5·2916416	17	4·5236131	5·2047795
18	4·6460151	5·3640868	18	4·5825190	5·2818278	18	4·5144926	5·1949892
19	4·6366093	5·3540648	19	4·5731132	5·2718237	19	4·5050868	5·1850025
20	4·6268955	5·3438814	20	4·5633994	5·2616559	20	4·4953730	5·1748489
21	4·6168643	5·3335732	21	4·5533682	5·2513610	21	4·4853418	5·1645673
22	4·6067527	5·3231857	22	4·5432566	5·2409872	22	4·4752302	5·1542063
23	4·5965634	5·3127180	23	4·5330673	5·2305338	23	4·4650409	5·1437665
24	4·5862982	5·3021697	24	4·5228021	5·2200000	24	4·4547757	5·1332469
25	4·5759581	5·2915386	25	4·5124620	5·2093842	25	4·4444356	5·1226458
26	4·5655432	5·2808221	26	4·5020471	5·1986841	26	4·4340207	5·1119608
27	4·5550528	5·2700163	27	4·4915567	5·1878953	27	4·4235303	5·1011888
28	4·5444853	5·2591170	28	4·4809892	5·1770145	28	4·4129628	5·0903251
29	4·5338385	5·2481195	29	4·4703424	5·1660360	29	4·4023160	5·0793651
30	4·5231091	5·2370169	30	4·4596130	5·1549544	30	4·3915866	5·0683028
31	4·5122931	5·2258025	31	4·4487970	5·1437625	31	4·3807706	5·0571327
32	4·5013856	5·2144688	32	4·4378895	5·1324524	32	4·3698631	5·0458454
33	4·4903809	5·2030071	33	4·4268848	5·1210166	33	4·3588584	5·0344335
34	4·4792725	5·1914080	34	4·4157764	5·1094449	34	4·3477500	5·0228884
35	4·4680530	5·1796616	35	4·4045569	5·0977279	35	4·3365305	5·0111995
36	4·4567142	5·1677559	36	4·3932181	5·0858545	36	4·3251917	4·9993559
37	4·4452470	5·1556794	37	4·3817509	5·0738122	37	4·3137245	4·9873462
38	4·4336416	5·1434190	38	4·3701455	5·0615882	38	4·3021191	4·9751578
39	4·4218872	5·1309600	39	4·3583911	5·0491692	39	4·2903647	4·9627759
40	4·4099724	5·1182882	40	4·3464763	5·0365395	40	4·2784499	4·9501866
41	4·3978847	5·1053851	41	4·3343886	5·0236836	41	4·2663622	4·9373739
42	4·3856109	5·0922352	42	4·3221148	5·0105819	42	4·2540884	4·9243206
43	4·3731369	5·0788167	43	4·3096408	4·9972177	43	4·2416144	4·9110062
44	4·3604480	5·0651098	44	4·2969519	4·9835682	44	4·2289255	4·8974121
45	4·3475283	5·0510900	45	4·2840322	4·9696111	45	4·2160058	4·8835138
46	4·3343613	5·0367319	46	4·2708652	4·9553202	46	4·2028388	4·8692880
47	4·3209296	5·0220066	47	4·2574335	4·9406679	47	4·1894071	4·8547043
48	4·3072150	5·0068822	48	4·2437189	4·9256220	48	4·1756925	4·8397332
49	4·2931984	4·9913218	49	4·2297023	4·9101461	49	4·1616759	4·8243380
50	4·2788600	4·9752856	50	4·2153639	4·8941997	50	4·1473375	4·8084784
51	4·2641790	4·9587249	51	4·2006829	4·8777370	51	4·1326565	4·7921072
52	4·2488893	4·9415875	52	4·1853932	4·8607015	52	4·1173668	4·7751705
53	4·2331548	4·9238676	53	4·1696587	4·8430951	53	4·1016323	4·7576693
54	4·2169582	4·9055223	54	4·1534621	4·8248688	54	4·0854357	4·7395597

JOINT LIVES:—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	78			79			80	
Age of (x)	$\lambda\ D_{x,\ 78}$	$\lambda\ N_{x,\ 78}$	Age of (x)	$\lambda\ D_{x,\ 79}$	$\lambda\ N_{x,\ 79}$	Age of (x)	$\lambda\ D_{x,\ 80}$	$\lambda\ N_{x,\ 80}$
55	4·2002723	4·8864918	55	4·1367762	4·8059716	55	4·0687498	4·7207859
56	4·1830594	4·8667120	56	4·1195633	4·7863346	56	4·0515369	4·7012873
57	4·1652714	4·8461100	57	4·1017753	4·7658868	57	4·0337489	4·6809878
58	4·1468499	4·8246022	58	4·0833538	4·7445464	58	4·0153274	4·6598069
59	4·1277263	4·8020961	59	4·0642302	4·7222217	59	3·9962038	4·6376558
60	4·1078215	4·7784920	60	4·0443254	4·6988119	60	3·9762990	4·6144331
61	4·0870462	4·7536826	61	4·0235501	4·6742097	61	3·9555237	4·5900311
62	4·0653007	4·7275494	62	4·0018046	4·6482986	62	3·9337782	4·5643338
63	4·0424750	4·6999686	63	3·9789789	4·6209532	63	3·9109525	4·5372155
64	4·0184488	4·6708079	64	3·9549527	4·5920401	64	3·8869263	4·5085437
65	3·9930914	4·6399237	65	3·9295953	4·5614136	65	3·8615689	4·4781764
66	3·9662618	4·6071695	66	3·9027657	4·5289390	66	3·8347393	4·4459645
67	3·9378087	4·5723880	67	3·8743126	4·4944443	67	3·8062862	4·4117495
68	3·9075706	4·5354148	68	3·8440745	4·4577696	68	3·7760481	4·3753661
69	3·8753753	4·4960774	69	3·8118792	4·4187416	69	3·7438528	4·3366410
70	3·8410407	4·4541961	70	3·7775146	4·3771789	70	3·7095182	4·2953918
71	3·8043741	4·4095818	71	3·7408780	4·3328937	71	3·6728516	4·2514287
72	3·7651725	4·3620393	72	3·7016764	4·2856874	72	3·6336500	4·2045546
73	3·7232228	4·3113643	73	3·6597267	4·2353557	73	3·5917003	4·1545615
74	3·6783012	4·2573447	74	3·6148051	4·1816852	74	3·5467787	4·1012365
75	3·6301739	4·1997593	75	3·5666778	4·1244543	75	3·4986514	4·0443567
76	3·5785965	4·1383798	76	3·5151004	4·0634329	76	3·4470740	3·9836908
77	3·5233146	4·0729682	77	3·4598185	3·9983818	77	3·3917921	3·9189991
78	3·4640632	4·0032779	78	3·4005671	3·9290545	78	3·3325407	3·8500321
79	3·4005671	3·9290545	79	3·3370710	3·8551931	79	3·2690446	3·7765341
80	3·3325407	3·8500321	80	3·2690446	3·7765341	80	3·2010182	3·6982363
81	3·2596881	3·7659389	81	3·1961920	3·6928003	81	3·1281656	3·6148656
82	3·1817030	3·6764897	82	3·1182069	3·6037115	82	3·0501805	3·5261337
83	3·0982691	3·5813932	83	3·0347730	3·5089685	83	2·9667466	3·4317504
84	3·0090593	3·4803462	84	2·9455632	3·4082725	84	2·8775368	3·3314074
85	2·9137365	3·3730360	85	2·8502404	3·3013081	85	2·7822140	3·2247920
86	2·8119531	3·2591396	86	2·7484570	3·1877519	86	2·6804306	3·1115793
87	2·7033513	3·1383236	87	2·6398552	3·0672700	87	2·5718288	2·9914356
88	2·5875629	3·0102452	88	2·5240668	2·9395173	88	2·4560404	2·8640154
89	2·4642095	2·8745485	89	2·4007134	2·8041415	89	2·3326870	2·7289622
90	2·3329020	2·7308695	90	2·2694059	2·6607735	90	2·2013795	2·5859128
91	2·1932415	2·5788306	91	2·1297454	2·5090384	91	2·0617190	2·4344875
92	2·0448184	2·4180460	92	1·9813223	2·3485491	92	1·9132959	2·2742987
93	1·8872129	2·2481136	93	1·8237168	2·1789045	93	1·7556904	2·1049474
94	1·7199948	2·0686226	94	1·6564987	1·9996919	94	1·5884723	1·9260212
95	1·5427237	1·8791441	95	1·4792276	1·8104852	95	1·4112012	1·7370916
96	1·3549488	1·6792298	96	1·2914527	1·6108368	96	1·2234263	1·5377146
97	1·1562089	1·4684020	97	1·0927128	1·4002685	97	1·0246864	1·3274161
98	0·9460326	1·2461143	98	0·8825365	1·1782544	98	0·8145101	1·1056669
99	0·7239382	1·0117269	99	0·6604121	0·9441321	99	0·5924157	0·8718472
100	0·4894334	0·7643256	100	0·4259373	0·6970374	100	0·3579109	0·6250448
101	0·2420159	0·5023998	101	0·1785198	0·4354781	101	0·1104934	0·3638563
102	9·9811729	0·2229764	102	9·9176768	0·1565189	102	9·8496504	0·0853976
103	9·7063813	$\bar{1}$·9191304	103	9·6428852	$\bar{1}$·8533331	103	9·5748588	$\bar{1}$·7829024
104	9·4171077	$\bar{1}$·5720580	104	9·3536116	$\bar{1}$·5071810	104	9·2855852	$\bar{1}$·4377506
105	9·1128083		105	9·0493122		105	8·9812858	
106	8·7929291		106	8·7294330		106	8·6614066	
107	8·4569057		107	8·3934096		107	8·3253832	
108	8·1041634		108	8·0406673		108	7·9726409	
109	7·7341171		109	7·6706210		109	7·6025946	

JOINT LIVES :—TWO MALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	81			82			83	
Age of (x)	λ $D_{x,\,81}$	λ $N_{x,\,81}$	**Age** of (x)	λ $D_{x,\,82}$	λ $N_{x,\,82}$	**Age** of (x)	λ $D_{x,\,83}$	λ $N_{x,\,83}$
0	4·7367103	5·3180537	0	4·6587252	5·2227948	0	4·5752913	5·1221683
1	4·6527081	5·2821631	1	4·5747230	5·1859839	1	4·4912891	5·0844165
2	4·6174272	5·2625064	2	4·5394421	5·1659849	2	4·4560082	5·0640692
3	4·5953139	5·2477136	3	4·5173288	5·1510098	3	4·4338949	5·0489096
4	4·5784122	5·2351556	4	4·5004271	5·1383365	4	4·4169932	5·0361197
5	4·5641848	5·2239119	5	4·4861997	5·1270148	5	4·4027658	5·0247188
6	4·5518236	5·2135592	6	4·4738385	5·1166107	6	4·3904046	5·0142622
7	4·5406801	5·2038011	7	4·4626950	5·1068196	7	4·3792611	5·0044366
8	4·5302659	5·1944467	8	4·4522808	5·0974469	8	4·3688469	4·9950435
9	4·5205185	5·1853905	9	4·4425334	5·0883856	9	4·3590995	4·9859758
10	4·5112833	5·1765207	10	4·4332982	5·0795206	10	4·3498643	4·9771152
11	4·5024188	5·1677370	11	4·4244337	5·0707518	11	4·3409998	4·9683582
12	4·4937968	5·1589547	12	4·4158117	5·0619900	12	4·3323778	4·9596171
13	4·4853023	5·1501025	13	4·4073172	5·0531638	13	4·3238833	4·9508150
14	4·4768334	5·1411241	14	4·3988183	5·0442128	14	4·3154144	4·9418914
15	4·4683016	5·1319761	15	4·3903165	5·0350938	15	4·3068826	4·9327998
16	4·4596313	5·1226307	16	4·3816462	5·0257752	16	4·2982123	4·9235087
17	4·4507605	5·1130730	17	4·3727754	5·0162425	17	4·2893415	4·9140003
18	4·4416400	5·1033025	18	4·3636549	5·0064938	18	4·2802210	4·9042729
19	4·4322342	5·0933352	19	4·3542191	4·9965423	19	4·2708152	4·8943393
20	4·4225204	5·0831955	20	4·3445353	4·9864184	20	4·2611014	4·8842271
21	4·4124892	5·0729252	21	4·3345041	4·9761596	21	4·2510702	4·8739817
22	4·4022776	5·0625775	22	4·3243925	4·9658229	22	4·2409586	4·8636559
23	4·3921883	5·0521505	23	4·3142032	4·9554087	23	4·2307693	4·8532528
24	4·3819231	5·0416446	24	4·3039380	4·9449152	24	4·2205041	4·8427720
25	4·3715830	5·0310572	25	4·2935979	4·9343419	25	4·2101640	4·8322105
26	4·3611681	5·0203869	26	4·2831830	4·9236853	26	4·1997491	4·8215679
27	4·3506777	5·0096302	27	4·2726926	4·9129433	27	4·1892587	4·8108399
28	4·3401102	4·9987832	28	4·2621251	4·9021117	28	4·1786912	4·8000232
29	4·3294634	4·9878410	29	4·2514783	4·8911861	29	4·1680144	4·7891130
30	4·3187340	4·9767974	30	4·2407489	4·8801611	30	4·1573150	4·7781049
31	4·3079180	4·9656466	31	4·2299329	4·8690292	31	4·1464990	4·7669918
32	4·2970105	4·9543819	32	4·2190254	4·8577841	32	4·1355915	4·7557659
33	4·2860058	4·9429931	33	4·2080207	4·8464181	33	4·1245868	4·7444198
34	4·2748974	4·9314726	34	4·1969123	4·8349214	34	4·1134784	4·7329459
35	4·2636779	4·9198105	35	4·1856928	4·8232845	35	4·1022589	4·7213332
36	4·2523391	4·9079957	36	4·1743540	4·8114966	36	4·0909201	4·7095718
37	4·2408719	4·8960167	37	4·1628868	4·7995473	37	4·0794529	4·6976495
38	4·2292665	4·8838612	38	4·1512814	4·7874229	38	4·0678475	4·6855555
39	4·2175121	4·8715158	39	4·1395270	4·7751107	39	4·0560931	4·6732753
40	4·2055973	4·8589647	40	4·1276122	4·7625968	40	4·0441783	4·6607953
41	4·1935096	4·8461929	41	4·1155245	4·7498646	41	4·0320906	4·6481003
42	4·1812358	4·8331841	42	4·1032507	4·7368974	42	4·0198168	4·6351740
43	4·1687618	4·8199188	43	4·0907767	4·7236781	43	4·0073428	4·6219973
44	4·1560729	4·8063760	44	4·0780878	4·7101851	44	3·9946539	4·6085511
45	4·1431532	4·7925346	45	4·0651681	4·6963966	45	3·9817342	4·5948140
46	4·1299862	4·7783690	46	4·0520011	4·6822895	46	3·9685672	4·5807613
47	4·1165545	4·7638524	47	4·0385694	4·6678348	47	3·9551355	4·5663664
48	4·1028399	4·7489520	48	4·0248548	4·6530030	48	3·9414209	4·5515988
49	4·0888233	4·7336337	49	4·0108382	4·6377578	49	3·9274043	4·5364229
50	4·0744849	4·7178560	50	3·9964998	4·6220585	50	3·9130659	4·5207985
51	4·0598039	4·7015732	51	3·9818188	4·6058584	51	3·8983849	4·5046784
52	4·0445142	4·6847287	52	3·9665291	4·5891030	52	3·8830952	4·4880058
53	4·0287797	4·6673287	53	3·9507946	4·5717984	53	3·8673607	4·4707924
54	4·0125831	4·6493280	54	3·9345980	4·5539022	54	3·8511641	4·4529949

JOINT LIVES :—TWO MALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	81		82			83		
Age of (x)	λ $D_{x,\,81}$	λ $N_{x,\,81}$	Age of (x)	λ $D_{x,\,82}$	λ $N_{x,\,82}$	Age of (x)	λ $D_{x,\,83}$	λ $N_{x,\,83}$
55	3·9958972	4·6306744	55	3·9179121	4·5353617	55	3·8344782	4·4345625
56	3·9786843	4·6113051	56	3·9006992	4·5161158	56	3·8172653	4·4154340
57	3·9608963	4·5911476	57	3·8829112	4·4960934	57	3·7994773	4·3955396
58	3·9424748	4·5701209	58	3·8644897	4·4752134	58	3·7810558	4·3747995
59	3·9233512	4·5481354	59	3·8453661	4·4533864	59	3·7619322	4·3531246
60	3·9034464	4·5250919	60	3·8254613	4·4305146	60	3·7420274	4·3304164
61	3·8826711	4·5008825	61	3·8046860	4·4064901	61	3·7212521	4·3065691
62	3·8609256	4·4753910	62	3·7829405	4·3811968	62	3·6995066	4·2814661
63	3·8380999	4·4484927	63	3·7601148	4·3545097	63	3·6766809	4·2549827
64	3·8140737	4·4200539	64	3·7360886	4·3262963	64	3·6526547	4·2269855
65	3·7887163	4·3899331	65	3·7107312	4·2964140	65	3·6272973	4·1973337
66	3·7618867	4·3579803	66	3·6839016	4·2647130	66	3·6004677	4·1658759
67	3·7334336	4·3240383	67	3·6554485	4·2310346	67	3·5720146	4·1324540
68	3·7031955	4·2879391	68	3·6252104	4·1952128	68	3·5417765	4·0969000
69	3·6710002	4·2495097	69	3·5930151	4·1570715	69	3·5095812	4·0590398
70	3·6366656	4·2085671	70	3·5586805	4·1164281	70	3·4752466	4·0186884
71	3·5999990	4·1649207	71	3·5220139	4·0730916	71	3·4385800	3·9756532
72	3·5607974	4·1183715	72	3·4828123	4·0268616	72	3·3993784	3·9297361
73	3·5188477	4·0687133	73	3·4408626	3·9775307	73	3·3574287	3·8807262
74	3·4739261	4·0157289	74	3·3959410	3·9248828	74	3·3125071	3·8284072
75	3·4257988	3·9591960	75	3·3478137	3·8686915	75	3·2643798	3·7725535
76	3·3742214	3·8988820	76	3·2962363	3·8087253	76	3·2128024	3·7129291
77	3·3189395	3·8345460	77	3·2409544	3·7447411	77	3·1575205	3·6492930
78	3·2596881	3·7659389	78	3·1817030	3·6764897	78	3·0982691	3·5813932
79	3·1961920	3·6928003	79	3·1182069	3·6037115	79	3·0347730	3·5089685
80	3·1281656	3·6148656	80	3·0501805	3·5261337	80	2·9667466	3·4317504
81	3·0553130	3·5318556	81	2·9773279	3·4434851	81	2·8938940	3·3494584
82	2·9773279	3·4434851	82	2·8993128	3·3554743	82	2·8159089	3·2618063
83	2·8938940	3·3494584	83	2·8159089	3·2618063	83	2·7324750	3·1684952
84	2·8046842	3·2494714	84	2·7266991	3·1621738	84	2·6432652	3·0692188
85	2·7093614	3·1432069	85	2·6313763	3·0562628	85	2·5479424	2·9636594
86	2·6075780	3·0303410	86	2·5295929	2·9437452	86	2·4461590	2·8514919
87	2·4989762	2·9105379	87	2·4209911	2·8242860	87	2·3375572	2·7323777
88	2·3831878	2·7834533	88	2·3052027	2·6975389	88	2·2217688	2·6059705
89	2·2598344	2·6487297	89	2·1818493	2·5631475	89	2·0984154	2·4719134
90	2·1285269	2·5060001	90	2·0505418	2·4207444	90	1·9671079	2·3298391
91	1·9888664	2·3548900	91	1·9108813	2·2699515	91	1·8274474	2·1793679
92	1·8404433	2·1950078	92	1·7624582	2·1103813	92	1·6790243	2·0201114
93	1·6828378	2·0259556	93	1·6048527	1·9416317	93	1·5214188	1·8516711
94	1·5156197	1·8473203	94	1·4376346	1·7632925	94	1·3542007	1·6736309
95	1·3383486	1·6586762	95	1·2603635	1·5749372	95	1·1769296	1·4855681
96	1·1505737	1·4595764	96	1·0725886	1·3761223	96	0·9891547	1·2870422
97	0·9518338	1·2495506	97	0·8738487	1·1663768	97	0·7904148	1·0775823
98	0·7416575	1·0280789	98	0·6636724	0·9451829	98	0·5802385	0·8566745
99	0·5195631	0·7945368	99	0·4415780	0·7119337	99	0·3581441	0·6237144
100	0·2850583	0·5480822	100	0·2070732	0·4657842	100	0·1236393	0·3778888
101	0·0376408	0·2872417	101	9·9596557	0·2053939	101	9·8762218	0·1178676
102	9·7767978	0·0092809	102	9·6988127	$\bar{1}$·9278834	102	9·6153788	$\bar{1}$·8409838
103	9·5020062	$\bar{1}$·7074850	103	9·4240211	$\bar{1}$·6268534	103	9·3405872	$\bar{1}$·5405797
104	9·2127326	$\bar{1}$·3634239	104	9·1347475	$\bar{1}$·2837534	104	9·0513136	$\bar{1}$·1986571
105	8·9084332		105	8·8304481		105	8·7470142	
106	8·5885540		106	8·5105689		106	8·4271350	
107	8·2525306		107	8·1745455		107	8·0911116	
108	7·8997883		108	7·8218032		108	7·7383693	
109	7·5297420		109	7·4517569		109	7·3683230	

JOINT LIVES :—TWO MALES.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	84		85			86		
Age of (x)	$\lambda\ D_{x,84}$	$\lambda\ N_{x,84}$	**Age** of (x)	$\lambda\ D_{x,85}$	$\lambda\ N_{x,85}$	**Age** of (x)	$\lambda\ D_{x,86}$	$\lambda\ N_{x,86}$
0	4·4860815	5·0158726	0	4·3907587	4·9035913	0	4·2889753	4·7849994
1	4·4020793	4·9771587	1	4·3067565	4·8638996	1	4·2049731	4·7443118
2	4·3667984	4·9564590	2	4·2714756	4·8428407	2	4·1696922	4·7228930
3	4·3446851	4·9411127	3	4·2493623	4·8273072	3	4·1475789	4·7071689
4	4·3277834	4·9282048	4	4·2324606	4·8142802	4	4·1306772	4·6940232
5	4·3135560	4·9167239	5	4·2182332	4·8027183	5	4·1164498	4·6823798
6	4·3011948	4·9062138	6	4·2058720	4·7921542	6	4·1040886	4·6717595
7	4·2900513	4·8963526	7	4·1947285	4·7822569	7	4·0929451	4·6618259
8	4·2796371	4·8869378	8	4·1843143	4·7728188	8	4·0825309	4·6523643
9	4·2698897	4·8778613	9	4·1745669	4·7637319	9	4·0727835	4·6432661
10	4·2606545	4·8690040	10	4·1653317	4·7548756	10	4·0635483	4·6344087
11	4·2517900	4·8602589	11	4·1564672	4·7461413	11	4·0546838	4·6256838
12	4·2431680	4·8515353	12	4·1478452	4·7374360	12	4·0460618	4·6169941
13	4·2346735	4·8427571	13	4·1393507	4·7286792	13	4·0375673	4·6082596
14	4·2262046	4·8338602	14	4·1308818	4·7198076	14	4·0290984	4·5994125
15	4·2176728	4·8247960	15	4·1223500	4·7107704	15	4·0205666	4·5904015
16	4·2090025	4·8155313	16	4·1136797	4·7015317	16	4·0118963	4·5811882
17	4·2001317	4·8060469	17	4·1048089	4·6920719	17	4·0030255	4·5717519
18	4·1910112	4·7963405	18	4·0956884	4·6823861	18	3·9939050	4·5620865
19	4·1816054	4·7864242	19	4·0862826	4·6724858	19	3·9844992	4·5522031
20	4·1718916	4·7763256	20	4·0765688	4·6624008	20	3·9747854	4·5421305
21	4·1618604	4·7660893	21	4·0665376	4·6521757	21	3·9647542	4·5319151
22	4·1517488	4·7557766	22	4·0564260	4·6418715	22	3·9546426	4·5216217
23	4·1415595	4·7453840	23	4·0462367	4·6314915	23	3·9444533	4·5112508
24	4·1312943	4·7349142	24	4·0359715	4·6210318	24	3·9341881	4·5008027
25	4·1209542	4·7243660	25	4·0256314	4·6104941	25	3·9238480	4·4902756
26	4·1105393	4·7137349	26	4·0152165	4·5998776	26	3·9134331	4·4796688
27	4·1000489	4·7030204	27	4·0047261	4·5891741	27	3·9029427	4·4689790
28	4·0894814	4·6922184	28	3·9941586	4·5783852	28	3·8923752	4·4582023
29	4·0788346	4·6813227	29	3·9835118	4·5675045	29	3·8817284	4·4473354
30	4·0681052	4·6703303	30	3·9727824	4·5565273	30	3·8709990	4·4363724
31	4·0572892	4·6592343	31	3·9619664	4·5454474	31	3·8601830	4·4253075
32	4·0463817	4·6480271	32	3·9510589	4·5342575	32	3·8492755	4·4141347
33	4·0353770	4·6367015	33	3·9400542	4·5229503	33	3·8382708	4·4028451
34	4·0242686	4·6252476	34	3·9289458	4·5115170	34	3·8271624	4·3914309
35	4·0130491	4·6136579	35	3·9177263	4·4999484	35	3·8159429	4·3798827
36	4·0017103	4·6019210	36	3·9063875	4·4882343	36	3·8046041	4·3681904
37	3·9902431	4·5900250	37	3·8949203	4·4763637	37	3·7931369	4·3563432
38	3·9786377	4·5779592	38	3·8833149	4·4643243	38	3·7815315	4·3443292
39	3·9668833	4·5657094	39	3·8715605	4·4521036	39	3·7697771	4·3321356
40	3·9549685	4·5532624	40	3·8596457	4·4396873	40	3·7578623	4·3197490
41	3·9428808	4·5406025	41	3·8475580	4·4270609	41	3·7457746	4·3071538
42	3·9306070	4·5277137	42	3·8352842	4·4142079	42	3·7335008	4·2943350
43	3·9181330	4·5145783	43	3·8228102	4·4011112	43	3·7210268	4·2812750
44	3·9054441	4·5011768	44	3·8101213	4·3877517	44	3·7083379	4·2679551
45	3·8925244	4·4874876	45	3·7972016	4·3741083	45	3·6954182	4·2543545
46	3·8793574	4·4734873	46	3·7840346	4·3601572	46	3·6822512	4·2404507
47	3·8659257	4·4591487	47	3·7706029	4·3458726	47	3·6688195	4·2262167
48	3·8522111	4·4444422	48	3·7568883	4·3312240	48	3·6551049	4·2116235
49	3·8381945	4·4293326	49	3·7428717	4·3161772	49	3·6410883	4·1966360
50	3·8238561	4·4137793	50	3·7285333	4·3006913	50	3·6267499	4·1812142
51	3·8091751	4·3977342	51	3·7138523	4·2847183	51	3·6120689	4·1653096
52	3·7938854	4·3811416	52	3·6985626	4·2682003	52	3·5967792	4·1488629
53	3·7781509	4·3640131	53	3·6828281	4·2511539	53	3·5810447	4·1318931
54	3·7619543	4·3463099	54	3·6666315	4·2335382	54	3·5648481	4·1143621

JOINT LIVES:—TWO MALES.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	84		85			86		
Age of (x)	λ $D_{x,84}$	λ $N_{x,84}$	Age of (x)	λ $D_{x,85}$	λ $N_{x,85}$	Age of (x)	λ $D_{x,86}$	λ $N_{x,86}$
55	3·7452684	4·3279798	55	3·6499456	4·2153057	55	3·5481622	4·0962198
56	3·7280555	4·3089633	56	3·6327327	4·1963951	56	3·5309193	4·0774104
57	3·7102675	4·2891904	57	3·6149447	4·1767385	57	3·5131613	4·0578638
58	3·6918460	4·2685832	58	3·5965232	4·1562571	58	3·4947398	4·0375030
59	3·6727224	4·2470529	59	3·5773996	4·1348643	59	3·4756162	4·0162405
60	3·6528176	4·2245020	60	3·5574948	4·1124633	60	3·4557114	3·9939813
61	3·6320423	4·2008234	61	3·5367195	4·0889468	61	3·4349361	3·9706197
62	3·6102968	4·1759027	62	3·5149740	4·0642000	62	3·4131906	3·9460399
63	3·5874711	4·1496150	63	3·4921483	4·0380993	63	3·3903649	3·9201181
64	3·5634449	4·1218267	64	3·4681221	4·0105120	64	3·3663387	3·8927222
65	3·5380875	4·0923961	65	3·4427647	3·9812944	65	3·3409813	3·8637106
66	3·5112579	4·0611734	66	3·4159351	3·9502977	66	3·3141517	3·8329308
67	3·4828048	4·0279987	67	3·3874820	3·9173626	67	3·2856986	3·8002261
68	3·4525667	3·9927055	68	3·3572439	3·8823202	68	3·2554605	3·7654271
69	3·4203714	3·9551165	69	3·3250486	3·8449957	69	3·2232652	3·7283562
70	3·3860368	3·9150493	70	3·2907140	3·8052024	70	3·1889306	3·6888308
71	3·3493702	3·8723095	71	3·2540474	3·7627499	71	3·1522640	3·6466546
72	3·3101686	3·8266953	72	3·2148458	3·7174334	72	3·1130624	3·6016277
73	3·2682189	3·7780007	73	3·1728961	3·6690425	73	3·0711127	3·5535359
74	3·2232973	3·7260039	74	3·1279745	3·6173621	74	3·0261911	3·5021608
75	3·1751700	3·6704797	75	3·0798472	3·5621608	75	2·9780638	3·4472761
76	3·1235926	3·6111932	76	3·0282698	3·5032049	76	2·9264864	3·3886429
77	3·0683107	3·5478989	77	2·9729879	3·4402471	77	2·8712045	3·3260152
78	3·0090593	3·4803462	78	2·9137365	3·3730360	78	2·8119531	3·2591396
79	2·9455632	3·4082725	79	2·8502404	3·3013081	79	2·7484570	3·1877519
80	2·8775368	3·3314074	80	2·7822140	3·2247920	80	2·6804306	3·1115793
81	2·8046842	3·2494714	81	2·7093614	3·1432069	81	2·6075780	3·0303410
82	2·7266991	3·1621738	82	2·6313763	3·0562628	82	2·5295929	2·9437452
83	2·6432652	3·0692188	83	2·5479424	2·9636594	83	2·4461590	2·8514919
84	2·5540554	2·9702962	84	2·4587326	2·8650897	84	2·3569192	2·7532704
85	2·4587326	2·8650897	85	2·3634098	2·7602332	85	2·2616264	2·6487629
86	2·3569492	2·7532704	86	2·2616264	2·6487629	86	2·1598430	2·5376390
87	2·2483474	2·6345025	87	2·1530246	2·5303393	87	2·0512412	2·4195593
88	2·1325590	2·5084368	88	2·0372362	2·4046148	88	1·9354528	2·2941751
89	2·0092056	2·3747154	89	1·9138828	2·2712306	89	1·8120994	2·1611274
90	1·8778981	2·2329700	90	1·7825753	2·1298171	90	1·6807919	2·0200466
91	1·7382376	2·0828249	91	1·6429148	1·9799952	91	1·5411314	1·8705514
92	1·5898145	1·9238857	92	1·4944917	1·8213792	92	1·3927083	1·7122514
93	1·4322090	1·7557537	93	1·3368862	1·6535598	93	1·2351028	1·5447537
94	1·2649909	1·5780200	94	1·1696681	1·4761285	94	1·0678847	1·3676298
95	1·0877198	1·3902531	95	0·9923970	1·2886672	95	0·8906136	1·1804614
96	0·8999149	1·1920152	96	0·8046221	1·0907199	96	0·7028387	0·9828228
97	0·7012050	0·9828454	97	0·6058822	0·8818353	97	0·5040988	0·7742249
98	0·4910287	0·7622358	98	0·3957059	0·6615193	98	0·2939225	0·5541862
99	0·2689343	0·5295715	99	0·1736115	0·4291868	99	0·0718281	0·3221572
100	0·0344295	0·2840696	100	9·9391067	0·1840096	100	9·8373233	0·0773679
101	9·7870120	0·0244446	101	9·6916892	$\bar{1}$·9247444	101	9·5899058	$\bar{1}$·8184898
102	9·5261690	$\bar{1}$·7480329	102	9·4308462	$\bar{1}$·6488477	102	9·3290628	$\bar{1}$·5430742
103	9·2513774	$\bar{1}$·4485517	103	9·1560546	$\bar{1}$·3500541	103	9·0542712	$\bar{1}$·2450189
104	8·9621038	$\bar{1}$·1075491	104	8·8667810	$\bar{1}$·0107239	104	8·7649976	$\bar{2}$·9068735
105	8·6578044		105	8·5624816		105	8·4606982	
106	8·3379252		106	8·2426024		106	8·1408190	
107	8·0019018		107	7·9065790		107	7·8047956	
108	7·6491595		108	7·5538367		108	7·4520533	
109	7·2791132		109	7·1837904		109	7·0820070	

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	87		88			89		
Age of (x)	$\lambda D_{x,87}$	$\lambda N_{x,87}$	Age of (x)	$\lambda D_{x,88}$	$\lambda N_{x,88}$	Age of (x)	$\lambda D_{x,89}$	$\lambda N_{x,89}$
0	4·1803735	4·6597594	0	4·0645851	4·5275229	0	3·9412317	4·3879267
1	4·0963713	4·6180596	1	3·9805829	4·4847968	1	3·8572295	4·3441621
2	4·0610904	4·5962770	2	3·9453020	4·4626471	2	3·8219486	4·3216434
3	4·0389771	4·5803650	3	3·9231887	4·4465450	3	3·7998353	4·3053518
4	4·0220754	4·5670982	4	3·9062870	4·4331599	4	3·7829336	4·2918476
5	4·0078480	4·5553726	5	3·8920596	4·4213522	5	3·7687062	4·2799584
6	3·9954868	4·5446974	6	3·8796984	4·4106205	6	3·7563150	4·2691703
7	3·9843433	4·5347253	7	3·8685549	4·4006095	7	3·7452015	4·2591206
8	3·9739291	4·5252386	8	3·8581407	4·3910974	8	3·7347873	4·2495814
9	3·9641817	4·5161291	9	3·8483933	4·3819736	9	3·7250399	4·2404439
10	3·9549465	4·5072704	10	3·8391581	4·3731132	10	3·7158047	4·2315786
11	3·9460820	4·4985524	11	3·8302936	4·3644013	11	3·7069402	4·2228730
12	3·9374600	4·4898778	12	3·8216716	4·3557401	12	3·6983182	4·2142242
13	3·9289655	4·4811631	13	3·8131771	4·3470451	13	3·6898237	4·2055470
14	3·9204966	4·4723402	14	3·8047082	4·3382447	14	3·6813548	4·1967690
15	3·9119648	4·4633542	15	3·7961764	4·3292840	15	3·6728230	4·1878314
16	3·9032945	4·4541669	16	3·7875061	4·3201206	16	3·6641527	4·1786930
17	3·8944237	4·4447536	17	3·7786353	4·3107309	17	3·6552819	4·1693252
18	3·8853032	4·4351082	18	3·7695148	4·3011053	18	3·6461614	4·1597199
19	3·8758974	4·4252412	19	3·7601090	4·2912541	19	3·6367556	4·1498842
20	3·8661836	4·4151807	20	3·7503952	4·2812057	20	3·6270418	4·1398473
21	3·8561524	4·4049748	21	3·7403640	4·2710089	21	3·6170106	4·1296593
22	3·8460408	4·3946910	22	3·7302524	4·2607340	22	3·6068990	4·1193932
23	3·8358515	4·3843299	23	3·7200631	4·2503825	23	3·5967097	4·1090501
24	3·8255863	4·3738917	24	3·7097979	4·2399536	24	3·5864145	4·0986306
25	3·8152462	4·3633754	25	3·6994578	4·2294472	25	3·5761044	4·0881333
26	3·8048313	4·3527788	26	3·6890429	4·2188613	26	3·5656895	4·0775573
27	3·7943409	4·3421004	27	3·6785525	4·2081927	27	3·5551991	4·0668996
28	3·7837734	4·3313362	28	3·6679850	4·1974402	28	3·5446316	4·0561568
29	3·7731266	4·3204815	29	3·6573382	4·1865982	29	3·5339848	4·0453265
30	3·7623972	4·3095324	30	3·6466088	4·1756613	30	3·5232554	4·0344026
31	3·7515812	4·2984823	31	3·6357928	4·1646253	31	3·5124394	4·0233788
32	3·7406737	4·2873244	32	3·6248853	4·1534823	32	3·5015319	4·0122503
33	3·7296690	4·2760521	33	3·6138806	4·1422252	33	3·4905272	4·0010081
34	3·7185606	4·2646559	34	3·6027722	4·1308466	34	3·4794188	3·9896447
35	3·7073411	4·2531271	35	3·5915527	4·1193361	35	3·4681993	3·9781522
36	3·6960023	4·2414557	36	3·5802139	4·1076844	36	3·4568605	3·9665191
37	3·6845351	4·2296304	37	3·5687467	4·0958804	37	3·4453933	3·9547354
38	3·6729297	4·2176403	38	3·5571413	4·0839127	38	3·4337879	3·9427891
39	3·6611753	4·2054726	39	3·5453869	4·0717690	39	3·4220335	3·9306684
40	3·6492605	4·1931132	40	3·5334721	4·0594361	40	3·4101187	3·9183602
41	3·6371728	4·1805484	41	3·5213844	4·0468989	41	3·3980310	3·9058498
42	3·6248990	4·1677615	42	3·5091106	4·0341434	42	3·3857572	3·8931218
43	3·6124250	4·1547364	43	3·4966366	4·0211504	43	3·3732832	3·8801611
44	3·5997361	4·1414538	44	3·4839477	4·0079039	44	3·3605943	3·8669474
45	3·5868164	4·1278942	45	3·4710280	3·9943822	45	3·3476746	3·8534627
46	3·5736494	4·1140343	46	3·4578610	3·9805642	46	3·3345076	3·8396841
47	3·5602177	4·0998487	47	3·4444293	3·9664242	47	3·3210759	3·8255871
48	3·5465031	4·0853081	48	3·4307147	3·9519332	48	3·3073613	3·8111432
49	3·5324865	4·0703774	49	3·4166981	3·9370568	49	3·2933447	3·7963176
50	3·5181481	4·0550162	50	3·4023597	3·9217536	50	3·2790063	3·7810700
51	3·5034671	4·0391761	51	3·3876787	3·9059744	51	3·2643253	3·7653496
52	3·4881774	4·0227970	52	3·3723890	3·8896591	52	3·2490356	3·7490936
53	3·4724429	4·0059000	53	3·3566545	3·8728314	53	3·2333011	3·7323310
54	3·4562463	3·9884479	54	3·3404579	3·8554537	54	3·2171045	3·7150251

JOINT LIVES :—TWO MALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	87			88			89	
Age of (x)	$\lambda\ D_{x,\,87}$	$\lambda\ N_{x,\,87}$	Age of (x)	$\lambda\ D_{x,\,88}$	$\lambda\ N_{x,\,88}$	Age of (x)	$\lambda\ D_{x,\,89}$	$\lambda\ N_{x,\,89}$
55	3·4395604	3·9703934	55	3·3237720	3·8374811	55	3·2004186	3·6971291
56	3·4223475	3·9516774	56	3·3065591	3·8188565	56	3·1832057	3·6785894
57	3·4045595	3·9322357	57	3·2887711	3·7995115	57	3·1654177	3·6593390
58	3·3861380	3·9119892	58	3·2703196	3·7793735	58	3·1469962	3·6393022
59	3·3670144	3·8908518	59	3·2512260	3·7583546	59	3·1278726	3·6183954
60	3·3471096	3·8687273	60	3·2313212	3·7363599	60	3·1079678	3·5965234
61	3·3263343	3·8455123	61	3·2105459	3·7132839	61	3·0871925	3·5735817
62	3·3045888	3·8210921	62	3·1888004	3·6890148	62	3·0654470	3·5494557
63	3·2817631	3·7953418	63	3·1659747	3·6634286	63	3·0426213	3·5240259
64	3·2577369	3·7681295	64	3·1419485	3·6363926	64	3·0185951	3·4971578
65	3·2323795	3·7393136	65	3·1165911	3·6077648	65	2·9932377	3·4687098
66	3·2055499	3·7087446	66	3·0897615	3·5773953	66	2·9664081	3·4385322
67	3·1770968	5·6762600	67	3·0613084	3·5451252	67	2·9379550	3·4064662
68	3·1468587	3·6416952	68	3·0310703	3·5107835	68	2·9077169	3·3723425
69	3·1146634	3·6048716	69	2·9988750	3·4741976	69	2·8755216	3·3359839
70	3·0803288	3·5656023	70	2·9645404	3·4351782	70	2·8411870	3·2972043
71	3·0436622	3·5236958	71	2·9278738	3·3935316	71	2·8045204	3·2558088
72	3·0044606	3·4789473	72	2·8886722	3·3490539	72	2·7653188	3·2115930
73	2·9625109	3·4311464	73	2·8467225	3·3015334	73	2·7233691	3·1643443
74	2·9175893	3·3800712	74	2·8018009	3·2507493	74	2·6784175	3·1138421
75	2·8694620	3·3254937	75	2·7536736	3·1964708	75	2·6303202	3·0598553
76	2·8178846	3·2671758	76	2·7020962	3·1384606	76	2·5787428	3·0021436
77	2·7626027	3·2048712	77	2·6468143	3·0764708	77	2·5234609	2·9404607
78	2·7033513	3·1383236	78	2·5875629	3·0102452	78	2·4642095	2·8745485
79	2·6398552	3·0672700	79	2·5240668	2·9395173	79	2·4007134	2·8041415
80	2·5718288	2·9914356	80	2·4560404	2·8640154	80	2·3326870	2·7289622
81	2·4989762	2·9105379	81	2·3831878	2·7834533	81	2·2598344	2·6487297
82	2·4209911	2·8242860	82	2·3052027	2·6975389	82	2·1818493	2·5631475
83	2·3375572	2·7323777	83	2·2217688	2·6059705	83	2·0984154	2·4719134
84	2·2483174	2·6345025	84	2·1325590	2·5084368	84	2·0092056	2·3747154
85	2·1530246	2·5303393	85	2·0372362	2·4046148	85	1·9138828	2·2712306
86	2·0512412	2·4195593	86	1·9354528	2·2941751	86	1·8120994	2·1611274
87	1·9426394	2·3018212	87	1·8268510	2·1767772	87	1·7034976	2·0440644
88	1·8268510	2·1767772	88	1·7110626	2·0520680	88	1·5877092	1·9196909
89	1·7031976	2·0440644	89	1·5877092	1·9196909	89	1·4643558	1·7876418
90	1·5721901	1·9033147	90	1·4564017	1·7792703	90	1·3330483	1·6475531
91	1·4325296	1·7541472	91	1·3167412	1·6304279	91	1·1933878	1·4990338
92	1·2841065	1·5961692	92	1·1683181	1·4727726	92	1·0449647	1·3416956
93	1·1265010	1·4289782	93	1·0107126	1·3058993	93	0·8873592	1·1751406
94	0·9592829	1·2521756	94	0·8434945	1·1293901	94	0·7201411	0·9989477
95	0·7820118	1·0653107	95	0·6662234	0·9428510	95	0·5428700	0·8126794
96	0·5942369	0·8679563	96	0·4784485	0·7457928	96	0·3550951	0·6159606
97	0·3954970	0·6596786	97	0·2797086	0·5377813	97	0·1563552	0·4082400
98	0·1853207	0·4399166	98	0·0695323	0·3183764	98	9·9461789	0·1890690
99	9·9632263	0·2081725	99	9·8474379	0·0868935	99	9·7240845	$\bar{1}$·9580380
100	9·7287215	$\bar{1}$·9636934	100	9·6129331	$\bar{1}$·8427340	100	9·4895797	$\bar{1}$·7140782
101	9·4813040	$\bar{1}$·7053505	101	9·3655156	$\bar{1}$·5846704	101	9·2421622	$\bar{1}$·4565179
102	9·2204610	$\bar{1}$·4303976	102	9·1046726	$\bar{1}$·3106933	102	8·9813192	$\bar{1}$·1826999
103	8·9456694	$\bar{1}$·1332195	103	8·8298810	$\bar{1}$·0141003	103	8·7065276	$\bar{2}$·8876173
104	8·6563958	$\bar{2}$·7958800	104	8·5406074	$\bar{2}$·6785184	104	8·4172540	$\bar{2}$·5526682
105	8·3520964		105	8·2363080		105	8·1129546	
106	8·0322172		106	7·9164288		106	7·7930754	
107	7·6961938		107	7·5804054		107	7·4570520	
108	7·3434515		108	7·2276631		108	7·1043097	
109	6·9734052		109	6·8576168		109	6·7342634	

JOINT LIVES:—TWO MALES.

Logarithms of the Series $D_{x, y}$ and $N_{x, y}$.

Age of (y)	90			91			92	
Age of (x)	$\lambda D_{x, 90}$	$\lambda N_{x, 90}$	Age of (x)	$\lambda D_{x, 91}$	$\lambda N_{x, 91}$	Age of (x)	$\lambda D_{x, 92}$	$\lambda N_{x, 92}$
0	3·8099242	4·2405980	0	3·6702637	4·0851499	0	3·5218406	3·9211843
1	3·7259220	4·1957838	1	3·5862615	4·0392769	1	3·4378384	3·8742423
2	3·6906411	4·1728947	2	3·5509806	4·0160166	2	3·4025575	3·8506113
3	3·6685278	4·1564135	3	3·5288673	3·9993472	3	3·3804442	3·8337544
4	3·6516261	4·1427911	4	3·5119656	3·9856061	4	3·3635425	3·8198965
5	3·6373987	4·1308203	5	3·4977382	3·9735550	5	3·3493151	3·8077636
6	3·6250375	4·1199767	6	3·4853770	3·9626553	6	3·3369539	3·7968101
7	3·6138940	4·1098875	7	3·4742335	3·9525275	7	3·3258104	3·7866429
8	3·6034798	4·1003217	8	3·4638193	3·9429337	8	3·3153962	3·7770213
9	3·5937324	4·0911681	9	3·4540719	3·9337646	9	3·3056488	3·7678353
10	3·5844972	4·0822988	10	3·4448367	3·9248884	10	3·2964136	3·7589535
11	3·5756327	4·0735959	11	3·4359722	3·9161896	11	3·2875491	3·7502553
12	3·5670107	4·0649598	12	3·4273502	3·9075623	12	3·2789271	3·7416384
13	3·5585162	4·0562995	13	3·4188557	3·8989193	13	3·2704326	3·7330086
14	3·5500473	4·0475419	14	3·4103868	3·8901817	14	3·2619637	3·7242915
15	3·5415155	4·0386281	15	3·4018550	3·8812899	15	3·2534319	3·7154208
16	3·5328452	4·0295124	16	3·3931847	3·8721977	16	3·2447616	3·7063507
17	3·5239744	4·0201678	17	3·3843139	3·8628740	17	3·2358908	3·6970488
18	3·5148539	4·0105811	18	3·3751934	3·8533076	18	3·2267703	3·6875004
19	3·5054481	4·0007616	19	3·3657876	3·8435019	19	3·2173645	3·6777119
20	3·4957343	3·9907357	20	3·3560738	3·8334882	20	3·2076507	3·6677070
21	3·4857031	3·9805556	21	3·3460426	3·8233158	21	3·1976195	3·6575434
22	3·4755915	3·9702981	22	3·3359310	3·8130657	22	3·1875079	3·6473008
23	3·4654022	3·9599634	23	3·3257417	3·8027395	23	3·1773186	3·6369811
24	3·4551370	3·9495525	24	3·3154765	3·7923363	24	3·1670534	3·6265867
25	3·4447969	3·9390643	25	3·3051364	3·7818566	25	3·1567133	3·6161141
26	3·4343820	3·9284973	26	3·2947215	3·7712986	26	3·1462984	3·6055647
27	3·4238916	3·9178494	27	3·2842311	3·7606600	27	3·1358080	3·5949348
28	3·4133241	3·9071178	28	3·2736636	3·7499380	28	3·1252405	3·5842215
29	3·4026773	3·8962969	29	3·2630168	3·7391283	29	3·1145937	3·5734228
30	3·3919479	3·8853849	30	3·2522874	3·7282255	30	3·1038643	3·5625308
31	3·3811319	3·8743739	31	3·2414714	3·7172276	31	3·0930483	3·5515415
32	3·3702244	3·8632580	32	3·2305639	3·7061244	32	3·0821408	3·5404521
33	3·3592197	3·8520308	33	3·2195592	3·6949096	33	3·0711361	3·5292506
34	3·3481113	3·8406825	34	3·2084508	3·6835765	34	3·0600277	3·5179305
35	3·3368918	3·8292054	35	3·1972313	3·6721145	35	3·0488082	3·5064834
36	3·3255530	3·8175905	36	3·1858925	3·6605155	36	3·0374694	3·4949000
37	3·3140858	3·8058256	37	3·1744253	3·6487697	37	3·0260022	3·4831692
38	3·3024804	3·7939000	38	3·1628199	3·6368628	38	3·0143968	3·4712829
39	3·2907260	3·7818013	39	3·1510655	3·6247852	39	3·0026424	3·4592236
40	3·2788112	3·7695161	40	3·1391507	3·6125222	40	2·9907276	3·4469824
41	3·2667235	3·7570306	41	3·1270630	3·6000609	41	2·9786399	3·4345437
42	3·2544497	3·7443305	42	3·1147892	3·5873854	42	2·9663661	3·4218930
43	3·2419757	3·7313977	43	3·1023152	3·5744815	43	2·9538921	3·4090145
44	3·2292868	3·7182168	44	3·0896263	3·5613292	44	2·9412032	3·3958915
45	3·2163671	3·7047663	45	3·0767066	3·5479112	45	2·9282835	3·3825040
46	3·2032001	3·6910249	46	3·0635396	3·5342064	46	2·9151165	3·3688315
47	3·1897684	3·6769687	47	3·0501079	3·5201887	47	2·9016848	3·3548509
48	3·1760538	3·6625690	48	3·0363933	3·5058307	48	2·8879702	3·3405336
49	3·1620372	3·6477926	49	3·0223767	3·4910996	49	2·8739536	3·3258464
50	3·1476988	3·6325970	50	3·0080385	3·4759544	50	2·8596152	3·3107483
51	3·1330178	3·6169322	51	2·9933573	3·4603426	51	2·8449342	3·2951863
52	3·1177281	3·6007345	52	2·9780676	3·4441981	52	2·8296445	3·2790931
53	3·1019936	3·5840326	53	2·9623331	3·4275552	53	2·8139100	3·2625052
54	3·0857970	3·5667933	54	2·9461365	3·4103793	54	2·7977134	3·2453898

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (z)	90		91			92		
Age of (x)	λ $D_{x,\,90}$	λ $N_{x,\,90}$	Age of (x)	λ $D_{x,\,91}$	λ $N_{x,\,91}$	Age of (x)	λ $D_{x,\,92}$	λ $N_{x,\,92}$
55	3·0691111	3·5489714	55	2·9294506	3·3926266	55	2·7810275	3·2277027
56	3·0518982	3·5305109	56	2·9122377	3·3742430	56	2·7638146	3·2093911
57	3·0341102	3·5113498	57	2·8944197	3·3551645	57	2·7460266	3·1903919
58	3·0156887	3·4914107	58	2·8760282	3·3353171	58	2·7276051	3·1706316
59	2·9965651	3·4706093	59	2·8569046	3·3146171	59	2·7084815	3·1500271
60	2·9766603	3·4488531	60	2·8369998	3·2929712	60	2·6885767	3·1284862
61	2·9558850	3·4260379	61	2·8162245	3·2702765	61	2·6678014	3·1059058
62	2·9341395	3·4020506	62	2·7944790	3·2464201	62	2·6460559	3·0821741
63	2·9113138	3·3767687	63	2·7716535	3·2212802	63	2·6232302	3·0571691
64	2·8872876	3·3500605	64	2·7476271	3·1947247	64	2·5992040	3·0307600
65	2·8619302	3·3217852	65	2·7222697	3·1666134	65	2·5738466	3·0028056
66	2·8351006	3·2917916	66	2·6954401	3·1367964	66	2·5470170	2·9731565
67	2·8066475	3·2599208	67	2·6669870	3·1051131	67	2·5185639	2·9416535
68	2·7764094	3·2260049	68	2·6367489	3·0713959	68	2·4883258	2·9081278
69	2·7442141	3·1898658	69	2·6045536	3·0354678	69	2·4561305	2·8724010
70	2·7098795	3·1513174	70	2·5702190	2·9971412	70	2·4217959	2·8342885
71	2·6732129	3·1101636	71	2·5335524	2·9562213	71	2·3851293	2·7935920
72	2·6340113	3·0662011	72	2·4943508	2·9125021	72	2·3459277	2·7501094
73	2·5920616	3·0192156	73	2·4524011	2·8657712	73	2·3039780	2·7036232
74	2·5471400	2·9689856	74	2·4074795	2·8158055	74	2·2590564	2·6539126
75	2·4990127	2·9152811	75	2·3593522	2·7623732	75	2·2109291	2·6007454
76	2·4474353	2·8578612	76	2·3077748	2·7052349	76	2·1593517	2·5438794
77	2·3921534	2·7964758	77	2·2524929	2·6441411	77	2·1040698	2·4830664
78	2·3329020	2·7308695	78	2·1932415	2·5788306	78	2·0448184	2·4180460
79	2·2694059	2·6607735	79	2·1297454	2·5090384	79	1·9813223	2·3485491
80	2·2013795	2·5859128	80	2·0617190	2·4344875	80	1·9132959	2·2742987
81	2·1285269	2·5060001	81	1·9888664	2·3548900	81	1·8404133	2·1950078
82	2·0505418	2·4207444	82	1·9108813	2·2699515	82	1·7624582	2·1103813
83	1·9671079	2·3298391	83	1·8274474	2·1793679	83	1·6790243	2·0201114
84	1·8778981	2·2329700	84	1·7382376	2·0828249	84	1·5898145	1·9238857
85	1·7825753	2·1298171	85	1·6429148	1·9799952	85	1·4944917	1·8213792
86	1·6807919	2·0200466	86	1·5411314	1·8705514	86	1·3927083	1·7122514
87	1·5721901	1·9033147	87	1·4325296	1·7541472	87	1·2841065	1·5961692
88	1·4564017	1·7792703	88	1·3167412	1·6304279	88	1·1683181	1·4727726
89	1·3330483	1·6475531	89	1·1933878	1·4990338	89	1·0449647	1·3416956
90	1·2017408	1·5077830	90	1·0620803	1·3595927	90	0·9136572	1·2025700
91	1·0620803	1·3595927	91	0·9224198	1·2117078	91	0·7739967	1·0550150
92	0·9136572	1·2025700	92	0·7739967	1·0550150	92	0·6255736	0·8986100
93	0·7560517	1·0363254	93	0·6163912	0·8890775	93	0·4679681	0·7330046
94	0·5888336	0·8604458	94	0·4491731	0·7134989	94	0·3007500	0·5577237
95	0·4115625	0·6744937	95	0·2719020	0·5278618	95	0·1234789	0·3723780
96	0·2237876	0·4780034	96	0·0841271	0·3316904	96	9·9357040	0·1765253
97	0·0250477	0·2706788	97	9·8853872	0·1245042	97	9·7369641	$\bar{1}$·9696954
98	9·8148714	0·0517697	98	9·6752109	$\bar{1}$·9061195	98	9·5267878	$\bar{1}$·7512791
99	9·5927770	$\bar{1}$·8209236	99	9·4531165	$\bar{1}$·6755034	99	9·3046934	$\bar{1}$·5213996
100	9·3582722	$\bar{1}$·5776067	100	9·2186117	$\bar{1}$·4323278	100	9·0701886	$\bar{1}$·2782962
101	9·1108547	$\bar{1}$·3201463	101	8·9711942	$\bar{1}$·1758016	101	8·8227711	$\bar{1}$·0220157
102	8·8500117	$\bar{1}$·0472749	102	8·7103512	$\bar{2}$·9025468	102	8·5619281	$\bar{2}$·7505084
103	8·5752201	$\bar{2}$·7520484	103	8·4355596	$\bar{2}$·6095944	103	8·2871365	$\bar{2}$·4563660
104	8·2859465	$\bar{2}$·4199557	104	8·1462860	$\bar{2}$·2764618	104	7·9978629	$\bar{2}$·1271048
105	7·9816471		105	7·8419866		105	7·6935635	
106	7·6617679		106	7·5221074		106	7·3736843	
107	7·3257445		107	7·1860840		107	7·0376609	
108	6·9730022		108	6·8333417		108	6·6849186	
109	6·6029559		109	6·4632954		109	6·3148723	

ENGLISH LIFE TABLE, No. 3.

JOINT LIVES:—Two Males.

Logarithms of the Series $D_{x, y}$ and $N_{x, y}$.

Age of (y)	93			94			95	
Age of (x)	λ $D_{x, 93}$	λ $N_{x, 93}$	Age of (x)	λ $D_{x, 94}$	λ $N_{x, 94}$	Age of (x)	λ $D_{x, 95}$	λ $N_{x, 95}$
0	3·3642351	3·7482865	0	3·1970170	3·5660260	0	3·0197459	3·3739523
1	3·2802329	3·7002692	1	3·1130148	3·5169252	1	2·9357437	3·3237611
2	3·2449520	3·6762655	2	3·0777339	3·4925509	2	2·9004628	3·2990130
3	3·2228387	3·6592229	3	3·0556206	3·4753210	3	2·8783495	3·2815996
4	3·2059370	3·6452493	4	3·0387189	3·4612343	4	2·8614478	3·2673972
5	3·1917096	3·6330370	5	3·0244915	3·4489427	5	2·8472204	3·2550276
6	3·1793484	3·6220264	6	3·0121303	3·4378773	6	2·8348592	3·2439098
7	3·1682049	3·6118221	7	3·0009868	3·4276321	7	2·8237157	3·2336260
8	3·1577907	3·6021718	8	2·9905726	3·4179558	8	2·8133015	3·2239199
9	3·1480433	3·5929691	9	2·9808252	3·4087358	9	2·8035541	3·2146820
10	3·1388081	3·5840800	10	2·9715900	3·3998386	10	2·7943189	3·2057767
11	3·1299436	3·5753842	11	2·9627255	3·3911428	11	2·7854544	3·1970809
12	3·1213216	3·5667733	12	2·9541035	3·3825407	12	2·7768324	3·1884855
13	3·1128271	3·5581588	13	2·9456090	3·3739383	13	2·7683379	3·1798951
14	3·1043582	3·5494581	14	2·9371401	3·3652555	14	2·7598690	3·1712287
15	3·0958264	3·5406097	15	2·9286083	3·3564259	15	2·7513372	3·1624183
16	3·0871561	3·5315607	16	2·9199380	3·3473982	16	2·7426669	3·1534115
17	3·0782853	3·5222799	17	2·9110672	3·3381372	17	2·7337961	3·1441706
18	3·0691648	3·5127498	18	2·9019467	3·3286258	18	2·7246756	3·1346768
19	3·0597590	3·5029758	19	2·8925409	3·3188661	19	2·7152698	3·1249315
20	3·0500452	3·4929838	20	2·8828271	3·3088840	20	2·7055560	3·1149597
21	3·0400140	3·4828250	21	2·8727959	3·2987341	21	2·6955248	3·1048169
22	3·0299024	3·4725912	22	2·8626843	3·2885059	22	2·6854132	3·0945959
23	3·0197131	3·4622797	23	2·8524950	3·2782015	23	2·6752239	3·0842974
24	3·0094479	3·4518907	24	2·8422298	3·2678207	24	2·6649587	3·0739240
25	2·9991078	3·4414269	25	2·8318897	3·2573641	25	2·6546186	3·0634742
26	2·9886929	3·4308847	26	2·8214748	3·2468295	26	2·6442037	3·0529474
27	2·9782025	3·4202631	27	2·8109844	3·2362157	27	2·6337133	3·0423408
28	2·9676350	3·4095590	28	2·8004169	3·2255196	28	2·6231458	3·0316528
29	2·9569882	3·3987683	29	2·7897701	3·2147382	29	2·6124990	3·0208794
30	2·9462588	3·3878870	30	2·7790407	3·2038659	30	2·6017696	3·0100166
31	2·9354428	3·3769089	31	2·7682247	3·1928987	31	2·5909536	2·9990583
32	2·9245353	3·3658289	32	2·7573172	3·1818287	32	2·5800461	2·9879999
33	2·9135306	3·3546395	33	2·7463125	3·1706510	33	2·5690414	2·9768321
34	2·9024222	3·3433332	34	2·7352041	3·1593566	34	2·5579330	2·9655497
35	2·8912027	3·3319002	35	2·7239846	3·1479378	35	2·5467135	2·9541431
36	2·8798639	3·3203322	36	2·7126458	3·1363834	36	2·5353747	2·9426037
37	2·8683967	3·3086184	37	2·7011786	3·1246851	37	2·5239075	2·9309195
38	2·8567913	3·2967472	38	2·6895732	3·1128308	38	2·5123021	2·9190812
39	2·8450369	3·2847075	39	2·6778188	3·1008084	39	2·5005477	2·9070758
40	2·8331221	3·2724863	40	2·6659040	3·0886059	40	2·4886329	2·8948913
41	2·8210344	3·2600695	41	2·6538163	3·0762096	41	2·4765452	2·8825143
42	2·8087606	3·2474420	42	2·6415425	3·0636046	42	2·4642714	2·8699302
43	2·7962866	3·2345881	43	2·6290685	3·0507748	43	2·4517974	2·8571237
44	2·7835977	3·2214915	44	2·6163796	3·0377033	44	2·4391085	2·8440769
45	2·7706780	3·2081338	45	2·6034599	3·0243723	45	2·4261888	2·8307721
46	2·7575110	3·1944929	46	2·5902929	3·0107629	46	2·4130218	2·8171904
47	2·7440793	3·1805465	47	2·5768612	2·9968495	47	2·3995901	2·8033096
48	2·7303647	3·1662676	48	2·5631466	2·9826059	48	2·3858755	2·7891010
49	2·7163481	3·1516220	49	2·5491300	2·9680008	49	2·3718589	2·7745331
50	2·7020097	3·1365689	50	2·5347916	2·9529909	50	2·3575205	2·7595659
51	2·6873287	3·1210557	51	2·5201106	2·9375229	51	2·3428395	2·7441420
52	2·6720390	3·1050102	52	2·5048209	2·9215252	52	2·3275498	2·7281874
53	2·6563045	3·0884749	53	2·4890864	2·9050383	53	2·3118153	2·7117499
54	2·6401079	3·0714161	54	2·4728898	2·8880340	54	2·2956187	2·6947956

JOINT LIVES:—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	93		94			95		
Age of (x)	λ $D_{x,\,93}$	λ $N_{x,\,93}$	Age of (x)	λ $D_{x,\,94}$	λ $N_{x,\,94}$	Age of (x)	λ $D_{x,\,95}$	λ $N_{x,\,95}$
55	2·6234220	3·0537920	55	2·4562039	2·8704689	55	2·2789328	2·6772875
56	2·6062091	3·0355486	56	2·4389910	2·8522915	56	2·2617199	2·6591724
57	2·5884211	3·0166243	57	2·4212030	2·8334385	57	2·2439319	2·6403890
58	2·5699996	2·9969471	58	2·4027815	2·8138398	58	2·2255104	2·6208655
59	2·5508760	2·9764339	59	2·3836579	2·7934132	59	2·2063868	2·6005210
60	2·5309712	2·9549922	60	2·3637531	2·7720671	60	2·1864820	2·5792667
61	2·5101959	2·9325209	61	2·3429778	2·7496992	61	2·1657067	2·5569992
62	2·4884504	2·9089079	62	2·3212323	2·7261997	62	2·1439612	2·5336081
63	2·4656247	2·8840320	63	2·2984066	2·7014471	63	2·1211355	2·5089739
64	2·4415985	2·8577617	64	2·2743804	2·6753108	64	2·0971093	2·4829650
65	2·4162411	2·8299582	65	2·2490230	2·6476509	65	2·0717519	2·4554449
66	2·3894115	2·8004696	66	2·2221934	2·6183180	66	2·0449223	2·4262607
67	2·3609584	2·7691387	67	2·1937403	2·5871517	67	2·0164692	2·3952548
68	2·3307203	2·7357968	68	2·1635022	2·5539849	68	1·9862311	2·3622581
69	2·2985250	2·7002657	69	2·1313069	2·5186416	69	1·9540358	2·3270940
70	2·2641904	2·6623564	70	2·0969723	2·4809321	70	1·9197012	2·2895754
71	2·2275238	2·6218770	71	2·0603057	2·4406588	71	1·8830346	2·2495056
72	2·1883222	2·5786198	72	2·0211041	2·3976202	72	1·8438330	2·2066786
73	2·1463725	2·5323721	73	1·9791544	2·3516014	73	1·8018833	2·1608801
74	2·1014509	2·4829079	74	1·9342328	2·3023757	74	1·7569617	2·1118859
75	2·0533236	2·4299960	75	1·8861055	2·2497124	75	1·7088344	2·0594623
76	2·0017462	2·3733957	76	1·8345281	2·1933676	76	1·6572570	2·0033680
77	1·9464643	2·3128543	77	1·7792462	2·1330913	77	1·6019751	1·9433481
78	1·8872129	2·2481136	78	1·7199948	2·0686226	78	1·5427237	1·8791441
79	1·8237168	2·1789045	79	1·6564987	1·9996919	79	1·4792276	1·8104852
80	1·7556904	2·1049474	80	1·5884723	1·9260212	80	1·4112012	1·7370916
81	1·6828378	2·0259556	81	1·5156197	1·8473203	81	1·3383486	1·6586762
82	1·6048527	1·9416317	82	1·4376346	1·7632925	82	1·2603635	1·5749372
83	1·5214188	1·8516711	83	1·3542007	1·6736 09	83	1·1769296	1·4855681
84	1·4322090	1·7557537	84	1·2649909	1·5780200	84	1·0877198	1·3902531
85	1·3368862	1·6535598	85	1·1696681	1·4761285	85	0·9923970	1·2886672
86	1·2351028	1·5447537	86	1·0678847	1·3676298	86	0·8906136	1·1804614
87	1·1265010	1·4289782	87	0·9592829	1·2521756	87	0·7820118	1·0653107
88	1·0107126	1·3058993	88	0·8434945	1·1293901	88	0·6662234	0·9428510
89	0·8873592	1·1751406	89	0·7201411	0·9989477	89	0·5428700	0·8126794
90	0·7560517	1·0363254	90	0·5888336	0·8604458	90	0·4115625	0·6744937
91	0·6163912	0·8890775	91	0·4491731	0·7134989	91	0·2719020	0·5278618
92	0·4679681	0·7330046	92	0·3007500	0·5577237	92	0·1234789	0·3723780
93	0·3103626	0·5676615	93	0·1431145	0·3927321	93	9·9658734	0·2076613
94	0·1431145	0·3927321	94	9·9759264	0·2180100	94	9·7986553	0·0333433
95	9·9658734	0·2076613	95	9·7986553	0·0333433	95	9·6213842	$\bar{1}$·8487432
96	9·7780985	0·0120776	96	9·6108804	$\bar{1}$·8380301	96	9·4336093	$\bar{1}$·6539839
97	9·5793586	$\bar{1}$·8055688	97	9·4121405	$\bar{1}$·6317481	97	9·2348694	$\bar{1}$·4479329
98	9·3691823	$\bar{1}$·5875987	98	9·2019642	$\bar{1}$·4141374	98	9·0246931	$\bar{1}$·2304489
99	9·1470879	$\bar{1}$·3573630	99	8·9798698	$\bar{1}$·1844075	99	8·8025987	$\bar{1}$·0013009
100	8·9125831	$\bar{1}$·1156105	100	8·7453650	$\bar{2}$·9415114	100	8·5680939	$\bar{2}$·7589119
101	8·6651656	$\bar{2}$·8591383	101	8·4979475	$\bar{2}$·6875290	101	8·3206764	$\bar{2}$·5024271
102	8·4043226	$\bar{2}$·5877110	102	8·2371045	$\bar{2}$·4149733	102	8·0598334	$\bar{2}$·2355284
103	8·1295310	$\bar{2}$·2966652	103	7·9623129	$\bar{2}$·1238516	103	7·7850418	$\bar{3}$·9395193
104	7·8402574	$\bar{3}$·9637878	104	7·6730393	$\bar{3}$·7993405	104	7·4957682	$\bar{3}$·6127839
105	7·5359580		105	7·3687399		105	7·1914688	
106	7·2160788		106	7·0488607		106	6·8715896	
107	6·8800554		107	6·7128373		107	6·5355662	
108	6·5273131		108	6·3600950		108	6·1828239	
109	6·1572668		109	5·9900487		109	5·8127776	

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	96		97			98		
Age of (x)	$\lambda\ D_{x,96}$	$\lambda\ N_{x,96}$	**Age** of (x)	$\lambda\ D_{x,97}$	$\lambda\ N_{x,97}$	**Age** of (x)	$\lambda\ D_{x,98}$	$\lambda\ N_{x,98}$
0	2·8319710	3·1715834	0	2·6332311	2·9583957	0	2·4230548	2·7337869
1	2·7479688	3·1202916	1	2·5492289	2·9059863	1	2·3390526	2·6802294
2	2·7126879	3·0951690	2	2·5139480	2·8804849	2	2·3037717	2·6543392
3	2·6905746	3·0775707	3	2·4918347	2·8627001	3	2·2816584	2·6363635
4	2·6736729	3·0632553	4	2·4749330	2·8482698	4	2·2647567	2·6218158
5	2·6594455	3·0508072	5	2·4607056	2·8357438	5	2·2505293	2·6092090
6	2·6470843	3·0396346	6	2·4483444	2·8245170	6	2·2381681	2·5979276
7	2·6359408	3·0293131	7	2·4372009	2·8141550	7	2·2270246	2·5875258
8	2·6255266	3·0195782	8	2·4267867	2·8043923	8	2·2166104	2·5777307
9	2·6157792	3·0103225	9	2·4170393	2·7951178	9	2·2068630	2·5684387
10	2·6065440	3·0014078	10	2·4078041	2·7861941	10	2·1976278	2·5595045
11	2·5976795	2·9927116	11	2·3989396	2·7774964	11	2·1887633	2·5508054
12	2·5890575	2·9841226	12	2·3903176	2 7689133	12	2·1801413	2·5422277
13	2·5805630	2·9755439	13	2·3818231	2·7603463	13	2·1716468	2·5336729
14	2·5720941	2·9668932	14	2·3733542	2·7517109	14	2·1631779	2·5250539
15	2·5635623	2·9581016	15	2·3648224	2·7429379	15	2·1546461	2·5162986
16	2·5548920	2·9491147	16	2·3561521	2·7339704	16	2·1459758	2·5073512
17	2·5460212	2·9398940	17	2·3472813	2·7247697	17	2·1371050	2·4981699
18	2·5369007	2·9304177	18	2·3381608	2·7153121	18	2·1279845	2·4887312
19	2·5274949	2·9206867	19	2·3287550	2·7055952	19	2·1185787	2·4790294
20	2·5177811	2·9107253	20	2·3190412	2·6956437	20	2·1088649	2·4690882
21	2·5077499	2·9005888	21	2·3090100	2·6855134	21	2·0988337	2·4589641
22	2·4976383	2·8903746	22	2·2988984	2·6753062	22	2·0887221	2·4487619
23	2·4874490	2·8800838	23	2·2887091	2·6650216	23	2·0785328	2·4384854
24	2·4771838	2·8697157	24	2·2784439	2·6546616	24	2·0682676	2·4281316
25	2·4668437	2·8592728	25	2·2681038	2·6442239	25	2·0579275	2·4177024
26	2·4564288	2·8487530	26	2·2576889	2·6337108	26	2·0475126	2·4071954
27	2·4459384	2·8381543	27	2·2471985	2·6231200	27	2·0370222	2·3966107
28	2·4353709	2·8274740	28	2·2366310	2·6124469	28	2·0264547	2·3859457
29	2·4247241	2·8167085	29	2·2259842	2·6016896	29	2·0158079	2·3751971
30	2·4139947	2·8058541	30	2·2152548	2·5908429	30	2·0050785	2·3643596
31	2·4031787	2·7949054	31	2·2044388	2·5799036	31	1·9942625	2·3534284
32	2·3922712	2·7838564	32	2·1935313	2·5688644	32	1·9833550	2·3423988
33	2·3812665	2·7727008	33	2·1825266	2·5577189	33	1·9723503	2·3312633
34	2·3701581	2·7614286	34	2·1714182	2·5464600	34	1·9612419	2·3200148
35	2·3589386	2·7500345	35	2·1601987	2·5350763	35	1·9500224	2·3086445
36	2·3475998	2·7385078	36	2·1488599	2·5235618	36	1·9386836	2·2971438
37	2·3361326	2·7268388	37	2·1373927	2·5119074	37	1·9272164	2·2855016
38	2·3245272	2·7150150	38	2·1257873	2·5000992	38	1·9156110	2·2737084
39	2·3127728	2·7030264	39	2·1140329	2·4881261	39	1·9038566	2·2617516
40	2·3008580	2·6908594	40	2·1021181	2·4759761	40	1·8919418	2·2496197
41	2·2887703	2·6785011	41	2·0900304	2·4636362	41	1·8798541	2·2372983
42	2·2764965	2·6659373	42	2·0777566	2·4510922	42	1·8675803	2·2247742
43	2·2640225	2·6531517	43	2·0652826	2·4383287	43	1·8551063	2·2120312
44	2·2513336	2·6401305	44	2·0525937	2·4253287	44	1·8424174	2·1990549
45	2·2384139	2·6268514	45	2·0396740	2·4120774	45	1·8294977	2·1858263
46	2·2252469	2·6132962	46	2·0265070	2·3985493	46	1·8163307	2·1723271
47	2·2118152	2·5994453	47	2·0130753	2·3847261	47	1·8028990	2·1585350
48	2·1981006	2·5852712	48	1·9993607	2·3705853	48	1·7891844	2·1444250
49	2·1840840	2·5707402	49	1·9853441	2·3560915	49	1·7751678	2·1299672
50	2·1697456	2·5558124	50	1·9710057	2·3412028	50	1·7608294	2·1151197
51	2·1550646	2·5404321	51	1·9563247	2·3258644	51	1·7461484	2·0998226
52	2·1397749	2·5245207	52	1·9410350	2·3099946	52	1·7308587	2·0839951
53	2·1240404	2·5081282	53	1·9253005	2·2936474	53	1·7151242	2·0676923
54	2·1078438	2·4912258	54	1·9091039	2·2767931	54	1·6989276	2·0508865

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	96			97			98	
Age of (x)	$\lambda\ D_{x,\,96}$	$\lambda\ N_{x,\,96}$	**Age** of (x)	$\lambda\ D_{x,\,97}$	$\lambda\ N_{x,\,97}$	**Age** of (x)	$\lambda\ D_{x,\,98}$	$\lambda\ N_{x,\,98}$
55	2·0911579	2·4737700	55	1·8924180	2·2593922	55	1·6822417	2·0335392
56	2·0739450	2·4557156	56	1·8752051	2·2413953	56	1·6650288	2·0156007
57	2·0561570	2·4369986	57	1·8574171	2·2227422	57	1·6472408	1·9970122
58	2·0377355	2·4175481	58	1·8389956	2·2033634	58	1·6288193	1·9777048
59	2·0186119	2·3972846	59	1·8198720	2·1831785	59	1·6096957	1·9575987
60	1·9987071	2·3761169	60	1·7999672	2·1620976	60	1·5897909	1·9366042
61	1·9779318	2·3539461	61	1·7791919	2·1400216	61	1·5690156	1·9146223
62	1·9561863	2·3306610	62	1·7574464	2·1168401	62	1·5472701	1·8915452
63	1·9333606	2·3061416	63	1·7346207	2·0924336	63	1·5244444	1·8672518
64	1·9093344	2·2802582	64	1·7105945	2·0666722	64	1·5004182	1·8416135
65	1·8839770	2·2528702	65	1·6852371	2·0394173	65	1·4750608	1·8144907
66	1·8571474	2·2238312	66	1·6584075	2·0105183	66	1·4482312	1·7857362
67	1·8286943	2·1929798	67	1·6299544	1·9798210	67	1·4197781	1·7551886
68	1·7984562	2·1601491	68	1·5997163	1·9471527	68	1·3895100	1·7226866
69	1·7662609	2·1251614	69	1·5675210	1·9123379	69	1·3573147	1·6880459
70	1·7319263	2·0878283	70	1·5331864	1·8751892	70	1·3230101	1·6510812
71	1·6952597	2·0479548	71	1·4965198	1·8355086	71	1·2863435	1·6115980
72	1·6560581	2·0053346	72	1·4573182	1·7930916	72	1·2471419	1·5693844
73	1·6141084	1·9597519	73	1·4153685	1·7477233	73	1·2051922	1·5242299
74	1·5691868	1·9109833	74	1·3704469	1·6991767	74	1·1602706	1·4759093
75	1·5210595	1·8587946	75	1·3223196	1·6472196	75	1·1121433	1·4241856
76	1·4694821	1·8029419	76	1·2707422	1·5916077	76	1·0605659	1·3688167
77	1·4142002	1·7431765	77	1·2154603	1·5320878	77	1·0052840	1·3095471
78	1·3549488	1·6792298	78	1·1562089	1·4684020	78	0·9460326	1·2461143
79	1·2914527	1·6108368	79	1·0927128	1·4002685	79	0·8825365	1·1782544
80	1·2234263	1·5377146	80	1·0246864	1·3274161	80	0·8145101	1·1056669
81	1·1505737	1·4595764	81	0·9518338	1·2495506	81	0·7416575	1·0280789
82	1·0725886	1·3761223	82	0·8738487	1·1663768	82	0·6636724	0·9451829
83	0·9891547	1·2870422	83	0·7904148	1·0775823	83	0·5802385	0·8566745
84	0·8999149	1·1920152	84	0·7012050	0·9828454	84	0·4910287	0·7622358
85	0·8046221	1·0907199	85	0·6058822	0·8818353	85	0·3957059	0·6615193
86	0·7028387	0·9828228	86	0·5040988	0·7742249	86	0·2939225	0·5541862
87	0·5942369	0·8679563	87	0·3954970	0·6596786	87	0·1853207	0·4399166
88	0·4784185	0·7457928	88	0·2797086	0·5377813	88	0·0695323	0·3183764
89	0·3550951	0·6159606	89	0·1563552	0·4082400	89	9·9461789	0·1890690
90	0·2237876	0·4780034	90	0·0250477	0·2706788	90	9·8148714	0·0517697
91	0·0841271	0·3316904	91	9·8853872	0·1245042	91	9·6752109	$\bar{1}$·9061195
92	9·9357040	0·1765253	92	9·7369641	$\bar{1}$·9696954	92	9·5267878	$\bar{1}$·7512791
93	9·7780985	0·0120776	93	9·5793586	$\bar{1}$·8055688	93	9·3691823	$\bar{1}$·5875987
94	9·6108804	$\bar{1}$·8380301	94	9·4121405	$\bar{1}$·6317481	94	9·2019642	$\bar{1}$·4141374
95	9·4336093	$\bar{1}$·6539839	95	9·2318694	$\bar{1}$·4479329	95	9·0246931	$\bar{1}$·2304489
96	9·2458344	$\bar{1}$·4589399	96	9·0470945	$\bar{1}$·2538224	96	8·8369182	$\bar{1}$·0366289
97	9·0470945	$\bar{1}$·2538224	97	8·8483546	$\bar{1}$·0476642	97	8·6381783	$\bar{2}$·8318698
98	8·8369182	$\bar{1}$·0366289	98	8·6381783	$\bar{2}$·8318698	98	8·4280020	$\bar{2}$·6138418
99	8·6148238	$\bar{2}$·8068580	99	8·4160839	$\bar{2}$·6031444	99	8·2059076	$\bar{2}$·3873898
100	8·3803190	$\bar{2}$·5658478	100	8·1815791	$\bar{2}$·3598355	100	7·9714028	$\bar{2}$·1461280
101	8·1329015	$\bar{2}$·3096302	101	7·9341616	$\bar{2}$·1072100	101	7·7239853	$\bar{3}$·8864907
102	7·8720585	$\bar{2}$·0374265	102	7·6733186	$\bar{3}$·8325089	102	7·4631423	$\bar{3}$·6232493
103	7·5972669	$\bar{3}$·7558749	103	7·3985270	$\bar{3}$·5440680	103	7·1883507	$\bar{3}$·3222193
104	7·3079933	$\bar{3}$·4149733	104	7·1092534	$\bar{3}$·2304489	104	6·8990771	$\bar{3}$·0000000
105	7·0036939		105	6·8049540		105	6·5947777	
106	6·6838147		106	6·4850748		106	6·2748985	
107	6·3477913		107	6·1490514		107	5·9388751	
108	5·9950490		108	5·7963091		108	5·5861328	
109	5·6250027		109	5·4262628		109	5·2160805	

JOINT LIVES:—Two Males.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	99			100			101	
Age of (x)	λ $D_{x, 99}$	λ $N_{x, 99}$	Age of (x)	λ $D_{x, 100}$	λ $N_{x, 100}$	Age of (r)	λ $D_{x, 101}$	λ $N_{x, 101}$
0	2·2009604	2·4970112	0	1·9664556	2·2470345	0	1·7190381	1·9822043
1	2·1169582	2·4422476	1	1·8824534	2·1909435	1	1·6350359	1·9245424
2	2·0816773	2·4159477	2	1·8471725	2·1641916	2	1·5997550	1·8972476
3	2·0595640	2·3977698	3	1·8250592	2·1457920	3	1·5776417	1·8785827
4	2·0426623	2·3830987	4	1·8081575	2·1309837	4	1·5607400	1·8636095
5	2·0284349	2·3704057	5	1·7939301	2·1181950	5	1·5465126	1·8507081
6	2·0160737	2·3590648	6	1·7815689	2·1067874	6	1·5341514	1·8392197
7	2·0049302	2·3486222	7	1·7704254	2·0962963	7	1·5230079	1·8286696
8	1·9945160	2·3387950	8	1·7600112	2·0864335	8	1·5125937	1·8187628
9	1·9847686	2·3294800	9	1·7502638	2·0770945	9	1·5028463	1·8093927
10	1·9755334	2·3205359	10	1·7410286	2·0681369	10	1·4936111	1·8004181
11	1·9666689	2·3118344	11	1·7321641	2·0594328	11	1·4847466	1·7917075
12	1·9580469	2·3032626	12	1·7235421	2·0508656	12	1·4761246	1·7831458
13	1·9495524	2·2947190	13	1·7150476	2·0423349	13	1·4676301	1·7746279
14	1·9410835	2·2861168	14	1·7065787	2·0337509	14	1·4591612	1·7660647
15	1·9325517	2·2773825	15	1·6980469	2·0250391	15	1·4506294	1·7573786
16	1·9238814	2·2684563	16	1·6893766	2·0161375	16	1·4419591	1·7485067
17	1·9150106	2·2592959	17	1·6805058	2·0070006	17	1·4330883	1·7393991
18	1·9058901	2·2498751	18	1·6713853	1·9976004	18	1·4239678	1·7300244
19	1·8964843	2·2401895	19	1·6619795	1·9879312	19	1·4145620	1·7203751
20	1·8867705	2·2302596	20	1·6522657	1·9780138	20	1·4048482	1·7104703
21	1·8767393	2·2201429	21	1·6422345	1·9679049	21	1·3948170	1·7003705
22	1·8666277	2·2099475	22	1·6321229	1·9577169	22	1·3847054	1·6901917
23	1·8564384	2·1996759	23	1·6219336	1·9474523	23	1·3745161	1·6799355
24	1·8461732	2·1893288	24	1·6116684	1·9371125	24	1·3642509	1·6696042
25	1·8358331	2·1789065	25	1·6013283	1·9266974	25	1·3539108	1·6591972
26	1·8254182	2·1684080	26	1·5909134	1·9162065	26	1·3434959	1·6487141
27	1·8149278	2·1578308	27	1·5804230	1·9056383	27	1·3330055	1·6381557
28	1·8043603	2·1471734	28	1·5698555	1·8949892	28	1·3224380	1·6275174
29	1·7937135	2·1364326	29	1·5592087	1·8842571	29	1·3117912	1·6167947
30	1·7829841	2·1256039	30	1·5484793	1·8734381	30	1·3010618	1·6059866
31	1·7721681	2·1146827	31	1·5376633	1·8625267	31	1·2902458	1·5950871
32	1·7612606	2·1036628	32	1·5267558	1·8515176	32	1·2793383	1·5840903
33	1·7502559	2·0925382	33	1·5157511	1·8404041	33	1·2683336	1·5729900
34	1·7391475	2·0813012	34	1·5046427	1·8291796	34	1·2572252	1·5617785
35	1·7279280	2·0699433	35	1·4934232	1·8178356	35	1·2460057	1·5504497
36	1·7165892	2·0584556	36	1·4820844	1·8063618	36	1·2346669	1·5389932
37	1·7051220	2·0468287	37	1·4706172	1·7947501	37	1·2231997	1·5273979
38	1·6935166	2·0350501	38	1·4590118	1·7829897	38	1·2115943	1·5156553
39	1·6817622	2·0231105	39	1·4472574	1·7710661	39	1·1998399	1·5037553
40	1·6698474	2·0109959	40	1·4353426	1·7589717	40	1·1879251	1·4916796
41	1·6577597	1·9986939	41	1·4232549	1·7466895	41	1·1758374	1·4794227
42	1·6454859	1·9861898	42	1·4109811	1·7342084	42	1·1635636	1·4669654
43	1·6330119	1·9734691	43	1·3985071	1·7215105	43	1·1510896	1·4542959
44	1·6203230	1·9605155	44	1·3858182	1·7085832	44	1·1384007	1·4413950
45	1·6074033	1·9473137	45	1·3728985	1·6954073	45	1·1254810	1·4282514
46	1·5942363	1·9338425	46	1·3597315	1·6819672	46	1·1123140	1·4148430
47	1·5808046	1·9200816	47	1·3462998	1·6682396	47	1·0988823	1·4011558
48	1·5670900	1·9060057	48	1·3325852	1·6542016	48	1·0851677	1·3871584
49	1·5530734	1·8915838	49	1·3185686	1·6398201	49	1·0711511	1·3728255
50	1·5387350	1·8767771	50	1·3042302	1·6250551	50	1·0568127	1·3581119
51	1·5240540	1·8615260	51	1·2895492	1·6098515	51	1·0421317	1·3429574
52	1·5087643	1·8457397	52	1·2742595	1·5941151	52	1·0268420	1·3272752
53	1·4930298	1·8294839	53	1·2585250	1·5779064	53	1·0111075	1·3111285
54	1·4768332	1·8127282	54	1·2423284	1·5612052	54	0·9949109	1·2944839

JOINT LIVES :—Two Males.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	99		100			101		
Age of (x)	λ $D_{x,\,99}$	λ $N_{x,\,99}$	Age of (x)	λ $D_{x,\,100}$	λ $N_{x,\,100}$	Age of (x)	λ $D_{x,\,101}$	λ $N_{x,\,101}$
55	1·4601473	1·7954351	55	1·2256425	1·5439713	55	0·9782250	1·2773181
56	1·4429344	1·7775573	56	1·2084296	1·5261570	56	0·9610121	1·2595772
57	1·4251464	1·7590352	57	1·1906416	1·5077075	57	0·9432241	1·2412052
58	1·4067249	1·7398009	58	1·1722201	1·4885521	58	0·9248026	1·2221414
59	1·3876013	1·7197769	59	1·1530965	1·4686146	59	0·9056790	1·2023030
60	1·3676965	1·6988718	60	1·1331917	1·4478075	60	0·8857742	1·1816064
61	1·3469212	1·6769879	61	1·1124164	1·4260295	61	0·8649989	1·1599520
62	1·3251757	1·6540166	62	1·0906709	1·4031737	62	0·8432534	1·1372275
63	1·3023500	1·6298417	63	1·0678452	1·3791241	63	0·8204277	1·1133215
64	1·2783238	1·6043309	64	1·0438190	1·3537528	64	0·7964015	1·0881077
65	1·2529664	1·5773470	65	1·0184616	1·3269193	65	0·7710441	1·0614487
66	1·2261368	1·5487395	66	0·9916320	1·2984754	66	0·7442145	1·0331904
67	1·1976837	1·5183534	67	0·9631789	1·2682620	67	0·7157614	1·0031804
68	1·1674456	1·4860166	68	0·9329408	1·2361138	68	0·6855233	0·9712480
69	1·1352503	1·4515608	69	0·9007455	1·2018476	69	0·6533280	0·9372169
70	1·1009157	1·4147896	70	0·8664109	1·1652918	70	0·6189934	0·9008912
71	1·0642491	1·3755063	71	0·8297443	1·1262353	71	0·5823268	0·8621016
72	1·0250475	1·3335117	72	0·7905427	1·0844690	72	0·5431252	0·8206152
73	0·9830978	1·2885800	73	0·7485930	1·0397908	73	0·5011755	0·7762143
74	0·9381762	1·2404918	74	0·7036714	0·9919567	74	0·4562539	0·7287027
75	0·8900489	1·1890128	75	0·6555441	0·9407455	75	0·4081266	0·6777985
76	0·8384715	1·1338964	76	0·6039667	0·8859094	76	0·3565492	0·6232906
77	0·7831896	1·0748895	77	0·5486848	0·8271883	77	0·3012673	0·5649145
78	0·7239382	1·0117269	78	0·4894334	0·7643256	78	0·2420159	0·5023998
79	0·6604421	0·9441321	79	0·4259373	0·6970374	79	0·1785198	0·4354781
80	0·5924157	0·8718472	80	0·3579109	0·6250448	80	0·1104934	0·3638563
81	0·5195631	0·7945568	81	0·2850583	0·5480822	81	0·0376408	0·2872417
82	0·4415780	0·7119337	82	0·2070732	0·4657842	82	9·9596557	0·2053939
83	0·3581441	0·6237144	83	0·1236393	0·3778888	83	9·8762218	0·1178676
84	0·2689343	0·5295715	84	0·0344295	0·2840696	84	9·7870120	0·0244446
85	0·1736115	0·4291868	85	9·9391067	0·1840096	85	9·6916892	$\bar{1}$·9247444
86	0·0718281	0·3221572	86	9·8373233	0·0773679	86	9·5899058	$\bar{1}$·8184898
87	9·9632263	0·2081725	87	9·7287215	$\bar{1}$·9636934	87	9·4813040	$\bar{1}$·7053505
88	9·8474379	0·0868935	88	9·6129331	$\bar{1}$·8427340	88	9·3655156	$\bar{1}$·5846704
89	9·7240845	$\bar{1}$·9580380	89	9·4895797	$\bar{1}$·7140782	89	9·2421622	$\bar{1}$·4565179
90	9·5927770	$\bar{1}$·8209236	90	9·3582722	$\bar{1}$·5776067	90	9·1108547	$\bar{1}$·3201463
91	9·4531165	$\bar{1}$·6755034	91	9·2186117	$\bar{1}$·4323278	91	8·9711942	$\bar{1}$·1758016
92	9·3046934	$\bar{1}$·5213996	92	9·0701886	$\bar{1}$·2782962	92	8·8227711	$\bar{1}$·0220157
93	9·1470879	$\bar{1}$·3573630	93	8·9125831	$\bar{1}$·1156105	93	8·6651656	$\bar{2}$·8591383
94	8·9798698	$\bar{1}$·1844075	94	8·7453650	$\bar{2}$·9415114	94	8·4979475	$\bar{2}$·6875290
95	8·8025987	$\bar{1}$·0013009	95	8·5680939	$\bar{2}$·7589119	95	8·3206764	$\bar{2}$·5024271
96	8·6148238	$\bar{2}$·8068580	96	8·3803190	$\bar{2}$·5658478	96	8·1329015	$\bar{2}$·3096302
97	8·4160839	$\bar{2}$·6031444	97	8·1815791	$\bar{2}$·3598355	97	7·9341616	$\bar{2}$·1072100
98	8·2059076	$\bar{2}$·3873898	98	7·9714028	$\bar{2}$·1461280	98	7·7239853	$\bar{3}$·8864907
99	7·9838132	$\bar{2}$·1553360	99	7·7493084	$\bar{3}$·9190781	99	7·5018909	$\bar{3}$·6627578
100	7·7493084	$\bar{3}$·9190781	100	7·5148036	$\bar{3}$·6720979	100	7·2673861	$\bar{3}$·4313638
101	7·5018909	$\bar{3}$·6627578	101	7·2673861	$\bar{3}$·4313638	101	7·0199686	$\bar{3}$·1461280
102	7·2410479	$\bar{3}$·3802112	102	7·0065431	$\bar{3}$·1461280	102	6·7591256	$\bar{4}$·9030900
103	6·9662563	$\bar{3}$·1139434	103	6·7317515	$\bar{4}$·8450980	103	6·4843340	$\bar{4}$·6020600
104	6·6769827	$\bar{4}$·7781513	104	6·4424779	$\bar{4}$·6020600	104	6·1950604	$\bar{4}$·3010300
105	6·3726833		105	6·1381785		105	5·8907610	
106	6·0528041		106	5·8182993		106	5·5708818	
107	5·7167807		107	5·4822759		107	5·2348584	
108	5·3640384		108	5·1295336		108	4·8821161	
109	4·9939921		109	4·7594873		109	4·5120698	

JOINT LIVES:—TWO MALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	102		103			104		
Age of (x)	λ $D_{x,\,102}$	λ $N_{x,\,102}$	Age of (x)	λ $D_{x,\,103}$	λ $N_{x,\,103}$	Age of (x)	λ $D_{x,\,104}$	λ $N_{x,\,104}$
0	1·4581951	1·6994501	0	1·1834035	1·3921339	0	0·8941299	1·0430320
1	1·3741929	1·6396916	1	1·0994013	1·3290845	1	0·8101277	0·9737419
2	1·3389120	1·6116744	2	1·0641204	1·2999625	2	0·7748468	0·9426379
3	1·3167987	1·5926508	3	1·0420071	1·2804076	3	0·7527335	0·9222011
4	1·2998970	1·5774631	4	1·0251054	1·2648933	4	0·7358318	0·9061680
5	1·2856696	1·5644116	5	1·0108780	1·2516285	5	0·7216044	0·8925454
6	1·2733084	1·5528203	6	0·9985168	1·2398873	6	0·7092432	0·8805850
7	1·2621649	1·5421903	7	0·9873733	1·2291492	7	0·6980997	0·8696775
8	1·2517507	1·5322229	8	0·9769591	1·2190892	8	0·6876855	0·8594866
9	1·2420033	1·5228119	9	0·9672117	1·2096142	9	0·6779381	0·8498983
10	1·2327681	1·5138101	10	0·9579765	1·2005714	10	0·6687029	0·8407896
11	1·2239036	1·5050889	11	0·9491120	1·1918282	11	0·6598384	0·8320041
12	1·2152816	1·4965284	12	0·9404900	1·1832641	12	0·6512164	0·8234221
13	1·2067871	1·4880259	13	0·9319955	1·1747719	13	0·6427219	0·8149331
14	1·1983182	1·4794846	14	0·9235266	1·1662584	14	0·6342530	0·8064445
15	1·1897864	1·4708293	15	0·9149948	1·1576381	15	0·6257212	0·7978697
16	1·1811161	1·4619935	16	0·9063245	1·1488462	16	0·6170509	0·7891363
17	1·1722453	1·4529252	17	0·8974537	1·1398287	17	0·6081801	0·7801804
18	1·1631248	1·4435868	18	0·8883332	1·1305428	18	0·5990596	0·7709698
19	1·1537190	1·4339633	19	0·8789274	1·1209653	19	0·5896538	0·7614617
20	1·1440052	1·4240760	20	0·8692136	1·1111011	20	0·5799400	0·7516486
21	1·1339740	1·4139850	21	0·8591824	1·1010249	21	0·5699088	0·7415849
22	1·1238024	1·4038169	22	0·8490708	1·0908680	22	0·5597972	0·7314518
23	1·1136731	1·3935717	23	0·8388815	1·0806373	23	0·5496079	0·7212334
24	1·1034079	1·3832515	24	0·8286163	1·0703298	24	0·5393427	0·7109462
25	1·0930678	1·3728550	25	0·8182762	1·0599495	25	0·5290026	0·7005826
26	1·0826529	1·3623826	26	0·8078613	1·0494894	26	0·5185877	0·6901429
27	1·0721625	1·3518330	27	0·7973709	1·0389538	27	0·5080973	0·6796277
28	1·0615950	1·3412069	28	0·7868034	1·0283394	28	0·4975298	0·6690285
29	1·0509482	1·3304990	29	0·7761566	1·0176468	29	0·4868830	0·6583549
30	1·0402188	1·3197014	30	0·7654272	1·0068724	30	0·4761536	0·6475981
31	1·0294028	1·3088161	31	0·7546112	0·9959991	31	0·4653376	0·6367586
32	1·0184953	1·2978349	32	0·7437037	0·9850356	32	0·4544301	0·6258164
33	1·0074906	1·2867505	33	0·7326990	0·9739725	33	0·4434254	0·6147707
34	0·9963822	1·2755555	34	0·7215906	0·9628001	34	0·4323170	0·6036315
35	0·9851627	1·2642439	35	0·7103711	0·9515124	35	0·4210975	0·5923766
36	0·9738239	1·2528069	36	0·6990323	0·9400979	36	0·4097587	0·5809934
37	0·9623567	1·2412351	37	0·6875651	0·9285495	37	0·3982915	0·5694793
38	0·9507513	1·2295129	38	0·6759597	0·9168644	38	0·3866861	0·5578199
39	0·9389969	1·2176365	39	0·6642053	0·9050129	39	0·3749317	0·5460242
40	0·9270821	1·2055914	40	0·6522905	0·8930012	40	0·3630169	0·5340388
41	0·9149944	1·1933584	41	0·6402028	0·8808079	41	0·3509292	0·5218961
42	0·9027206	1·1809340	42	0·6279290	0·8684152	42	0·3386554	0·5095654
43	0·8902466	1·1682942	43	0·6154550	0·8558219	43	0·3261814	0·4970126
44	0·8775577	1·1554301	44	0·6027661	0·8429959	44	0·3134925	0·4842571
45	0·8646380	1·1423206	45	0·5898464	0·8299403	45	0·3005728	0·4712477
46	0·8514710	1·1289547	46	0·5766794	0·8166191	46	0·2874058	0·4580029
47	0·8380393	1·1153076	47	0·5632477	0·8030267	47	0·2739741	0·4444820
48	0·8243247	1·1013656	48	0·5495331	0·7891434	48	0·2602595	0·4306716
49	0·8103081	1·0870854	49	0·5355165	0·7749401	49	0·2462429	0·4165573
50	0·7959697	1·0724374	50	0·5211781	0·7603697	50	0·2319045	0·4020894
51	0·7812887	1·0573504	51	0·5064971	0·7453715	51	0·2172235	0·3872118
52	0·7659990	1·0417242	52	0·4912074	0·7298287	52	0·2019338	0·3717880
53	0·7502645	1·0256458	53	0·4754729	0·7138264	53	0·1861993	0·3558919
54	0·7340679	1·0090853	54	0·4592763	0·6973601	54	0·1700027	0·3395309

JOINT LIVES :—TWO MALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	102			103			104	
Age of (x)	λ $D_{x,\,102}$	λ $N_{x,\,102}$	Age of (x)	λ $D_{x,\,103}$	λ $N_{x,\,103}$	Age of (x)	λ $D_{x,\,104}$	λ $N_{x,\,104}$
55	0·7173820	0·9919921	55	0·4425904	0·6803808	55	0·1533168	0·3226947
56	0·7001691	0·9743413	56	0·4253775	0·6628334	56	0·1361039	0·3053084
57	0·6823811	0·9560675	57	0·4075895	0·6446847	57	0·1183159	0·2873090
58	0·6639596	0·9371065	58	0·3891680	0·6258575	58	0·0998944	0·2686482
59	0·6448360	0·9173900	59	0·3700444	0·6062846	59	0·0807708	0·2492718
60	0·6249312	0·8968237	60	0·3501396	0·5858892	60	0·0608660	0·2290672
61	0·6041559	0·8753160	61	0·3293643	0·5645595	61	0·0400907	0·2080111
62	0·5824104	0·8527605	62	0·3076188	0·5422028	62	0·0183452	0·1859103
63	0·5595847	0·8290270	63	0·2847931	0·5187113	63	9·9955195	0·1626839
64	0·5355585	0·8040031	64	0·2607669	0·4939318	64	9·9714933	0·1382711
65	0·5102011	0·7775501	65	0·2354095	0·4677413	65	9·9461359	0·1124374
66	0·4833715	0·7495276	66	0·2085799	0·4400112	66	9·9193063	0·0850764
67	0·4549184	0·7197621	67	0·1801268	0·4105748	67	9·8908532	0·0560659
68	0·4246803	0·6880993	68	0·1498887	0·3792511	68	9·8606151	0·0252239
69	0·3924850	0·6543498	69	0·1176934	0·3458832	69	9·8284198	$\bar{1}$·9923326
70	0·3581504	0·6183410	70	0·0833588	0·3102684	70	9·7940852	$\bar{1}$·9572720
71	0·3214838	0·5798522	71	0·0466922	0·2722362	71	9·7574186	$\bar{1}$·9198100
72	0·2822822	0·5387245	72	0·0074906	0·2315206	72	9·7182170	$\bar{1}$·8797838
73	0·2403325	0·4946971	73	9·9655409	0·1879999	73	9·6762673	$\bar{1}$·8368303
74	0·1954109	0·4475456	74	9·9206193	0·1413871	74	9·6313157	$\bar{1}$·7909885
75	0·1472836	0·3970705	75	9·8724920	0·0914207	75	9·5832184	$\bar{1}$·7417817
76	0·0957062	0·3429751	76	9·8209146	0·0379442	76	9·5316410	$\bar{1}$·6890423
77	0·0404243	0·2850394	77	9·7656327	$\bar{1}$·9805942	77	9·4763591	$\bar{1}$·6326597
78	9·9811729	0·2229764	78	9·7063813	$\bar{1}$·9191304	78	9·4171077	$\bar{1}$·5720580
79	9·9176768	0·1565189	79	9·6428852	$\bar{1}$·8533331	79	9·3536116	$\bar{1}$·5071810
80	9·8496504	0·0853976	80	9·5748588	$\bar{1}$·7829024	80	9·2855852	$\bar{1}$·4377506
81	9·7767978	0·0092809	81	9·5020062	$\bar{1}$·7074850	81	9·2127326	$\bar{1}$·3634239
82	9·6988127	$\bar{1}$·9278834	82	9·4240211	$\bar{1}$·6268534	82	9·1347475	$\bar{1}$·2837534
83	9·6153788	$\bar{1}$·8409838	83	9·3405872	$\bar{1}$·5405797	83	9·0513136	$\bar{1}$·1986571
84	9·5261690	$\bar{1}$·7480329	84	9·2513774	$\bar{1}$·4485517	84	8·9621038	$\bar{1}$·1075491
85	9·4308462	$\bar{1}$·6488477	85	9·1560546	$\bar{1}$·3500541	85	8·8667810	$\bar{1}$·0107239
86	9·3290628	$\bar{1}$·5430742	86	9·0542712	$\bar{1}$·2450189	86	8·7649976	$\bar{2}$·9068735
87	9·2204610	$\bar{1}$·4303976	87	8·9456694	$\bar{1}$·1332195	87	8·6563958	$\bar{2}$·7958800
88	9·1046726	$\bar{1}$·3106933	88	8·8298810	$\bar{1}$·0141003	88	8·5406074	$\bar{2}$·6785184
89	8·9813192	$\bar{1}$·1826999	89	8·7065276	$\bar{2}$·8876173	89	8·4172540	$\bar{2}$·5526682
90	8·8500117	$\bar{1}$·0472749	90	8·5752201	$\bar{2}$·7520484	90	8·2859465	$\bar{2}$·4199557
91	8·7103512	$\bar{2}$·9025468	91	8·4355596	$\bar{2}$·6095944	91	8·1462860	$\bar{2}$·2764618
92	8·5619281	$\bar{2}$·7505084	92	8·2871365	$\bar{2}$·4563660	92	7·9978629	$\bar{2}$·1271048
93	8·4043226	$\bar{2}$·5877110	93	8·1295310	$\bar{2}$·2966652	93	7·8402574	$\bar{3}$·9637878
94	8·2371045	$\bar{2}$·4149733	94	7·9623129	$\bar{2}$·1238516	94	7·6730393	$\bar{3}$·7993405
95	8·0598334	$\bar{2}$·2355284	95	7·7850418	$\bar{3}$·9395193	95	7·4957682	$\bar{3}$·6127839
96	7·8720585	$\bar{2}$·0374265	96	7·5972669	$\bar{3}$·7558749	96	7·3079933	$\bar{3}$·4149733
97	7·6733186	$\bar{3}$·8325089	97	7·3985270	$\bar{3}$·5440680	97	7·1092534	$\bar{3}$·2304489
98	7·4631423	$\bar{3}$·6232493	98	7·1883507	$\bar{3}$·3222193	98	6·8990771	$\bar{3}$·0000000
99	7·2410479	$\bar{3}$·3802112	99	6·9662563	$\bar{3}$·1139434	99	6·6769827	$\bar{4}$·7781513
100	7·0065431	$\bar{3}$·1461280	100	6·7317515	$\bar{4}$·8450980	100	6·4424779	$\bar{4}$·6020600
101	6·7591256	$\bar{4}$·9030900	101	6·4843340	$\bar{4}$·6020600	101	6·1950604	$\bar{4}$·3010300
102	6·4982826	$\bar{4}$·6020600	102	6·2234910	$\bar{4}$·3010300	102	5·9342174	
103	6·2234910	$\bar{4}$·3010300	103	5·9486994		103	5·6594258	
104	5·9342174		104	5·6594258		104	5·3701522	
105	5·6299180		105	5·3551264		105	5·0658528	
106	5·3100388		106	5·0352472		106	4·7459736	
107	4·9740154		107	4·6992238		107	4·4099502	
108	4·6212731		108	4·3464815		108	4·0572079	
109	4·2512268		109	3·9764352		109	3·6871616	

JOINT LIVES:—Two Males.

Equal Ages.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	Equal Ages.		x	y	Equal Ages.	
0	0	2,618,832	32,910,622	55	55	86,393·6	817,338·9
1	1	1,778,702	30,291,790	56	56	79,809·7	730,945·3
2	2	1,511,964	28,513,088	57	57	73,532·5	651,135·6
3	3	1,365,573	27,001,124	58	58	67,551·7	577,603·1
4	4	1,263,314	25,635,551	59	59	61,857·1	510,051·4
5	5	1,183,196	24,372,237	60	60	56,439·1	448,194·3
6	6	1,117,723	23,189,041	61	61	51,289·6	391,755·2
7	7	1,061,811	22,071,318	62	62	46,402·2	340,465·6
8	8	1,012,089	21,009,507	63	63	41,772·1	294,063·4
9	9	967,663	19,997,418	64	64	37,396·8	252,291·3
10	10	927,371	19,029,755	65	65	33,275·1	214,894·5
11	11	890,276	18,102,384	66	66	29,407·7	181,619·4
12	12	855,619	17,212,108	67	67	25,796·1	152,211·7
13	13	822,795	16,356,489	68	68	22,442·9	126,415·6
14	14	791,323	15,533,694	69	69	19,350·3	103,972·7
15	15	760,835	14,742,371	70	70	16,520·3	84,622·4
16	16	731,054	13,981,536	71	71	13,953·6	68,102·1
17	17	701,791	13,250,482	72	72	11,648·8	54,148·5
18	18	672,925	12,548,691	73	73	9,602·46	42,499·66
19	19	644,400	11,875,766	74	74	7,807·99	32,897·20
20	20	616,209	11,231,366	75	75	6,255·82	25,089·21
21	21	588,390	10,615,157	76	76	4,933·21	18,833·39
22	22	561,620	10,026,767	77	77	3,824·42	13,900·18
23	23	535,875	9,465,147	78	78	2,911·14	10,075·76
24	24	511,132	8,929,272	79	79	2,173·06	7,164·62
25	25	487,363	8,418,140	80	80	1,588·61	4,991·56
26	26	464,540	7,930,777	81	81	1,135·83	3,402·95
27	27	442,632	7,466,237	82	82	793·127	2,267·119
28	28	421,607	7,023,605	83	83	540·101	1,473·992
29	29	401,434	6,601,998	84	84	358·142	933·891
30	30	382,081	6,200,564	85	85	230·892	575·749
31	31	363,516	5,818,483	86	86	144·492	344·857
32	32	345,707	5,454,967	87	87	87·6273	200·3647
33	33	328,623	5,109,260	88	88	51·4118	112·7374
34	34	312,235	4,780,637	89	89	29·1310	61·3256
35	35	296,512	4,468,402	90	90	15·9126	32·1946
36	36	281,427	4,171,890	91	91	8·3641	16·2820
37	37	266,951	3,890,463	92	92	4·2225	7·9179
38	38	253,058	3,623,512	93	93	2·0434	3·6954
39	39	239,724	3,370,454	94	94	·9461	1·6520
40	40	226,925	3,130,730	95	95	·4182	·7059
41	41	214,638	2,903,805	96	96	·1761	·2877
42	42	202,842	2,689,167	97	97	·0705	·1116
43	43	191,518	2,486,325	98	98	·0268	·0411
44	44	180,648	2,294,807	99	99	·0096	·0143
45	45	170,213	2,114,159	100	100	·0033	·0047
46	46	160,199	1,943,946	101	101	·0010	·0014
47	47	150,590	1,783,747	102	102	·0003	·0004
48	48	141,373	1,633,157	103	103	·0001	·0001
49	49	132,536	1,491,784	104	104	·0000	·0000
50	50	124,067	1,359,248	105	105	·0000	·0000
51	51	115,956	1,235,181				
52	52	108,073	1,119,225				
53	53	100,519	1,011,152				
54	54	93,293·9	910,632·8				

JOINT LIVES:—TWO MALES.

Difference of Age 1 Year.

Ages		$D_{x, y}$	$N_{x, y}$	Ages		$D_{x, y}$	$N_{x, y}$
x	y	Difference of Age 1 Year.		x	y	Difference of Age 1 Year.	
1	0	2,158,268	31,543,703	56	55	83,036·4	772,751·9
2	1	1,639,919	29,385,435	57	56	76,606·8	689,715·5
3	2	1,436,905	27,745,516	58	57	70,478·7	613,108·7
4	3	1,313,449	26,308,611	59	58	64,641·7	542,630·0
5	4	1,222,600	24,995,162	60	59	59,086·0	477,988·3
6	5	1,149,994	23,772,562	61	60	53,802·7	418,902·3
7	6	1,089,408	22,622,568	62	61	48,784·7	365,099·6
8	7	1,036,652	21,533,160	63	62	44,026·3	316,314·9
9	8	989,627	20,496,508	64	63	39,524·0	272,288·6
10	9	947,303	19,506,881	65	64	35,275·8	232,764·6
11	10	908,634	18,559,578	66	65	31,281·7	197,488·8
12	11	872,776	17,650,944	67	66	27,542·8	166,207·1
13	12	839,047	16,778,168	68	67	24,061·1	138,664·3
14	13	806,906	15,939,121	69	68	20,839·3	114,603·2
15	14	775,929	15,132,215	70	69	17,879·4	93,763·9
16	15	745,796	14,356,286	71	70	15,182·8	75,884·5
17	16	716,273	13,610,490	72	71	12,749·2	60,701·7
18	17	687,207	12,894,217	73	72	10,576·3	47,952·5
19	18	658,508	12,207,010	74	73	8,658·86	37,376·24
20	19	630,147	11,548,502	75	74	6,988·95	28,717·38
21	20	602,139	10,918,355	76	75	5,555·30	21,728·43
22	21	574,849	10,316,216	77	76	4,343·58	16,173·13
23	22	548,596	9,741,367	78	77	3,336·68	11,829·55
24	23	523,357	9,192,771	79	78	2,515·17	8,492·87
25	24	499,106	8,669,414	80	79	1,858·00	5,977·70
26	25	475,815	8,170,308	81	80	1,343·28	4,119·70
27	26	453,454	7,694,493	82	81	949·135	2,776·420
28	27	431,991	7,241,039	83	82	654·499	1,827·285
29	28	411,396	6,809,048	84	83	439·810	1,172·786
30	29	391,638	6,397,652	85	84	287·563	732·976
31	30	372,683	6,006,014	86	85	182·653	445·413
32	31	354,499	5,633,331	87	86	112·523	262·760
33	32	337,057	5,278,832	88	87	67·1199	150·2371
34	33	320,325	4,941,775	89	88	38·6998	83·1172
35	34	304,272	4,621,450	90	89	21·5302	44·4174
36	35	288,871	4,317,178	91	90	11·5367	22·8872
37	36	274,093	4,028,307	92	91	5·9429	11·3505
38	37	259,911	3,754,214	93	92	2·9374	5·4076
39	38	246,301	3,494,303	94	93	1·3904	2·4702
40	39	233,236	3,248,002	95	94	·6290	1·0798
41	40	220,696	3,014,766	96	95	·2714	·4508
42	41	208,657	2,794,070	97	96	·1115	·1794
43	42	197,099	2,585,413	98	97	·0435	·0679
44	43	186,004	2,388,314	99	98	·0161	·0244
45	44	175,353	2,202,310	100	99	·0056	·0083
46	45	165,130	2,026,957	101	100	·0019	·0027
47	46	155,320	1,861,827	102	101	·0006	·0008
48	47	145,909	1,706,507	103	102	·0002	·0002
49	48	136,883	1,560,598	104	103	·0000	·0000
50	49	128,232	1,423,715	105	104	·0000	·0000
51	50	119,943	1,295,483				
52	51	111,945	1,175,540				
53	52	104,227	1,063,595				
54	53	96,838·9	959,368·3				
55	54	89,777·5	862,529·4				

JOINT LIVES:—Two Males.

Difference of Age 2 Years.

Difference of Age 105 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Difference of Age 2 Years.**	
2	0	1,989,869	30,580,264
3	1	1,558,508	28,590,395
4	2	1,382,058	27,031,887
5	3	1,271,118	25,649,829
6	4	1,188,291	24,378,711
7	5	1,120,861	23,190,420
8	6	1,063,596	22,069,559
9	7	1,013,644	21,005,963
10	8	968,805	19,992,319
11	9	928,163	19,023,514
12	10	890,773	18,095,351
13	11	855,871	17,204,578
14	12	822,843	16,348,707
15	13	791,208	15,525,864
16	14	760,592	14,734,656
17	15	730,717	13,974,064
18	16	701,388	13,243,347
19	17	672,484	12,541,959
20	18	643,943	11,869,475
21	19	615,758	11,225,532
22	20	588,281	10,609,774
23	21	561,519	10,021,493
24	22	535,781	9,459,974
25	23	511,044	8,924,193
26	24	487,280	8,413,149
27	25	464,459	7,925,869
28	26	442,553	7,461,410
29	27	421,530	7,018,857
30	28	401,357	6,597,327
31	29	382,004	6,195,970
32	30	363,439	5,813,966
33	31	345,629	5,450,527
34	32	328,545	5,104,898
35	33	312,155	4,776,353
36	34	296,431	4,464,198
37	35	281,343	4,167,767
38	36	266,866	3,886,424
39	37	252,971	3,619,558
40	38	239,635	3,366,587
41	39	226,834	3,126,952
42	40	214,546	2,900,118
43	41	202,749	2,685,572
44	42	191,424	2,482,823
45	43	180,552	2,291,399
46	44	170,116	2,110,847
47	45	160,101	1,940,731
48	46	150,492	1,780,630
49	47	141,275	1,630,138
50	48	132,438	1,488,863
51	49	123,969	1,356,425
52	50	115,794	1,232,456
53	51	107,962	1,116,662
54	52	100,412	1,008,700
55	53	93,188·8	908,287·6
56	54	86,288·8	815,098·8
57	55	79,704·1	728,810·0
58	56	73,425·4	649,105·9
59	57	67,442·6	575,680·5
60	58	61,745·9	508,237·9
61	59	56,326·1	446,492·0
62	60	51,175·1	390,165·9
63	61	46,286·9	338,990·8
64	62	41,656·8	292,703·9
65	63	37,282·3	251,047·1
66	64	33,162·5	213,764·8
67	65	29,297·9	180,602·3
68	66	25,690·3	151,304·4
69	67	22,341·9	125,614·1
70	68	19,255·2	103,272·2
71	69	16,431·8	84,017·0
72	70	13,872·3	67,585·2
73	71	11,575·3	53,712·9
74	72	9,536·97	42,137·61
75	73	7,750·57	32,600·64
76	74	6,206·32	24,850·07
77	75	4,891·31	18,643·75
78	76	3,789·63	13,752·44
79	77	2,882·83	9,962·81
80	78	2,150·51	7,079·98
81	79	1,571·06	4,929·47
82	80	1,122·48	3,358·41
83	81	783·238	2,235·931
84	82	532·965	1,452·693
85	83	353·136	919·728
86	84	227·483	566·592
87	85	142·241	339·109
88	86	86·1892	196·8680
89	87	50·5240	110·6788
90	88	28·6023	60·1548
91	89	15·6095	31·5525
92	90	8·1970	15·9430
93	91	4·1342	7·7460
94	92	1·9987	3·6118
95	93	·9244	1·6131
96	94	·4082	·6887
97	95	·1717	·2805
98	96	·0687	·1088
99	97	·0261	·0401
100	98	·0094	·0140
101	99	·0032	·0046
102	100	·0010	·0014
103	101	·0003	·0004
104	102	·0001	·0001
105	103	·0000	·0000
		Difference of Age 105 Years.	
105	0	3·8889	3·8889

JOINT LIVES:—Two Males.

Difference of Age 3 Years.

Difference of Age 104 Years.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Difference of Age 3 Years.**	
3	0	1,891,086	29,743,403
4	1	1,499,020	27,852,317
5	2	1,337,516	26,353,297
6	3	1,235,448	25,015,781
7	4	1,158,189	23,780,333
8	5	1,094,303	22,622,144
9	6	1,039,990	21,527,841
10	7	992,317	20,487,851
11	8	949,230	19,495,534
12	9	909,918	18,546,304
13	10	873,519	17,636,386
14	11	839,343	16,762,867
15	12	806,836	15,923,524
16	13	775,569	15,116,688
17	14	745,214	14,341,119
18	15	715,531	13,595,905
19	16	686,361	12,880,374
20	17	657,609	12,194,013
21	18	629,240	11,536,404
22	19	601,588	10,907,164
23	20	574,640	10,305,576
24	21	548,402	9,730,936
25	22	523,176	9,182,534
26	23	498,934	8,659,358
27	24	475,650	8,160,424
28	25	453,294	7,684,774
29	26	431,836	7,231,480
30	27	411,243	6,799,644
31	28	391,485	6,388,401
32	29	372,530	5,996,916
33	30	354,345	5,624,386
34	31	336,901	5,270,041
35	32	320,166	4,933,140
36	33	304,111	4,612,974
37	34	288,706	4,308,863
38	35	273,925	4,020,157
39	36	259,740	3,746,232
40	37	246,125	3,486,492
41	38	233,058	3,240,367
42	39	220,513	3,007,309
43	40	208,471	2,786,796
44	41	196,911	2,578,325
45	42	185,813	2,381,414
46	43	175,160	2,195,601
47	44	164,936	2,020,441
48	45	155,124	1,855,505
49	46	145,712	1,700,381
50	47	136,687	1,554,669
51	48	128,036	1,417,982
52	49	119,681	1,289,946
53	50	111,674	1,170,265
54	51	104,010	1,058,591
55	52	96,627·0	954,580·6
56	53	89,567·6	857,953·6
57	54	82,825·9	768,386·0
58	55	76,394·0	685,560·1
59	56	70,262·3	609,166·1
60	57	64,421·3	538,903·8
61	58	58,861·7	474,482·5
62	59	53,575·2	415,620·8
63	60	48,554·9	362,045·6
64	61	43,795·7	313,490·7
65	62	39,294·2	269,695·0
66	63	35,048·8	230,400·8
67	64	31,059·5	195,352·0
68	65	27,327·4	164,292·5
69	66	23,854·7	136,965·1
70	67	20,643·6	113,110·4
71	68	17,696·3	92,466·8
72	69	15,013·6	74,770·5
73	70	12,595·1	59,756·9
74	71	10,437·9	47,161·8
75	72	8,536·57	36,723·91
76	73	6,882·66	28,187·34
77	74	5,464·53	21,304·68
78	75	4,267·50	15,840·15
79	76	3,274·16	11,572·65
80	77	2,464·86	8,298·49
81	78	1,818·39	5,833·63
82	79	1,312·83	4,015·24
83	80	926·289	2,702·405
84	81	637·800	1,776·116
85	82	427·934	1,138·316
86	83	279·357	710·382
87	84	177·153	431·025
88	85	108·952	253·872
89	86	64·8783	144·9197
90	87	37·3414	80·0414
91	88	20·7368	42·7000
92	89	11·0908	21·9632
93	90	5·7023	10·8724
94	91	2·8130	5·1701
95	92	1·3289	2·3571
96	93	·5999	1·0282
97	94	·2583	·4283
98	95	·1059	·1700
99	96	·0412	·0641
100	97	·0152	·0229
101	98	·0053	·0077
102	99	·0017	·0024
103	100	·0005	·0007
104	101	·0002	·0002
105	102	·0000	·0000

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Difference of Age 104 Years.**	
104	0	7·8366	11·0416
105	1	3·2050	3·2050

JOINT LIVES:—Two Males.

Difference of Age 4 Years.

Difference of Age 103 Years.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Difference of Age 4 Years.**	
4	0	1,818,903	28,969,992
5	1	1,450,708	27,151,089
6	2	1,299,983	25,700,381
7	3	1,204,151	24,400,398
8	4	1,130,746	23,196,247
9	5	1,070,016	22,065,501
10	6	1,018,108	20,995,485
11	7	972,268	19,977,377
12	8	930,571	19,005,109
13	9	892,294	18,074,538
14	10	856,651	17,182,244
15	11	823,014	16,325,593
16	12	790,888	15,502,579
17	13	759,888	14,711,691
18	14	729,727	13,951,803
19	15	700,201	13,222,076
20	16	671,179	12,521,875
21	17	642,594	11,850,696
22	18	614,759	11,208,102
23	19	587,637	10,593,343
24	20	561,217	10,005,706
25	21	535,500	9,444,489
26	22	510,779	8,908,989
27	23	487,027	8,398,210
28	24	464,216	7,911,183
29	25	442,317	7,446,967
30	26	421,298	7,004,650
31	27	401,128	6,583,352
32	28	381,775	6,182,224
33	29	363,209	5,800,449
34	30	345,397	5,437,240
35	31	328,309	5,091,843
36	32	311,915	4,763,534
37	33	296,186	4,451,619
38	34	281,094	4,155,433
39	35	266,610	3,874,339
40	36	252,711	3,607,729
41	37	239,369	3,355,018
42	38	226,563	3,115,649
43	39	214,270	2,889,086
44	40	202,468	2,674,816
45	41	191,139	2,472,348
46	42	180,264	2,281,209
47	43	169,826	2,100,945
48	44	159,808	1,931,119
49	45	150,198	1,771,311
50	46	140,980	1,621,113
51	47	132,143	1,480,133
52	48	123,606	1,347,990
53	49	115,422	1,224,384
54	50	107,586	1,108,962
55	51	100,089	1,001,376
56	52	92,872·1	901,286·6
57	53	85,973·2	808,414·5
58	54	79,386·2	722,441·3

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Difference of Age 4 Years.**	
59	55	73,103·0	643,055·1
60	56	67,114·7	569,952·1
61	57	61,412·2	502,837·4
62	58	55,987·0	441,425·2
63	59	50,832·1	385,438·2
64	60	45,941·7	334,606·1
65	61	41,311·8	288,664·4
66	62	36,940·2	247,352·6
67	63	32,826·2	210,412·4
68	64	28,970·5	177,586·2
69	65	25,374·8	148,615·7
70	66	22,041·4	123,240·9
71	67	18,972·3	101,199·5
72	68	16,168·9	82,227·2
73	69	13,631·2	66,058·3
74	70	11,357·4	52,427·1
75	71	9,342·97	41,069·72
76	72	7,580·64	31,726·75
77	73	6,060·02	24,146·11
78	74	4,767·62	18,086·09
79	75	3,687·04	13,318·47
80	76	2,799·46	9,631·43
81	77	2,084·20	6,831·97
82	78	1,519·51	4,747·77
83	79	1,083·36	3,228·26
84	80	754·287	2,144·902
85	81	512·108	1,390·615
86	82	338·527	878·507
87	83	217·549	539·980
88	84	135·694	322·431
89	85	82·0130	186·7371
90	86	47·9504	104·7241
91	87	27·0726	56·7737
92	88	14·7339	29·7011
93	89	7·7154	14·9672
94	90	3·8800	7·2518
95	91	1·8703	3·3718
96	92	·8624	1·5015
97	93	·3796	·6391
98	94	·1592	·2595
99	95	·0635	·1003
100	96	·0240	·0368
101	97	·0086	·0128
102	98	·0029	·0042
103	99	·0009	·0013
104	100	·0003	·0004
105	101	·0001	·0001

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Difference of Age 103 Years.**	
103	0	15·2547	24·6680
104	1	6·4584	9·4133
105	2	2·9549	2·9549

JOINT LIVES:—Two Males.

Difference of Age 5 Years.

Difference of Age 102 Years.

Ages x	Ages y	$D_{x,\ y}$	$N_{x,\ y}$
		Difference of Age 5 Years.	
5	0	1,760,281	28,237,130
6	1	1,410,000	26,476,849
7	2	1,267,052	25,066,849
8	3	1,175,619	23,799,797
9	4	1,105,650	22,624,178
10	5	1,047,503	21,518,528
11	6	997,538	20,471,025
12	7	953,156	19,473,487
13	8	912,547	18,520,331
14	9	875,062	17,607,784
15	10	839,986	16,732,722
16	11	806,747	15,892,736
17	12	774,898	15,085,989
18	13	744,097	14,311,091
19	14	714,093	13,566,994
20	15	684,714	12,852,901
21	16	655,855	12,168,187
22	17	627,805	11,512,332
23	18	600,503	10,884,527
24	19	573,911	10,284,024
25	20	548,012	9,710,113
26	21	522,810	9,162,101
27	22	498,588	8,639,291
28	23	475,319	8,140,703
29	24	452,974	7,665,384
30	25	431,523	7,212,410
31	26	410,935	6,780,887
32	27	391,179	6,369,952
33	28	372,223	5,978,773
34	29	354,036	5,606,550
35	30	336,588	5,252,514
36	31	319,848	4,915,926
37	32	303,787	4,596,078
38	33	288,376	4,292,291
39	34	273,588	4,003,915
40	35	259,395	3,730,327
41	36	245,774	3,470,932
42	37	232,699	3,225,158
43	38	220,148	2,992,459
44	39	208,100	2,772,311
45	40	196,534	2,564,211
46	41	185,431	2,367,677
47	42	174,774	2,182,246
48	43	164,547	2,007,472
49	44	154,733	1,842,925
50	45	145,320	1,688,192
51	46	136,294	1,542,872
52	47	127,572	1,406,578
53	48	119,208	1,279,006
54	49	111,197	1,159,798
55	50	103,531	1,048,601
56	51	96,200·0	945,069·6
57	52	89,145·1	848,869·6
58	53	82,402·7	759,724·5
59	54	75,966·4	677,321·8
60	55	69,828·2	601,355·4
61	56	63,979·7	531,527·2
62	57	58,412·9	467,547·5
63	58	53,120·4	409,134·6
64	59	48,096·3	356,014·2
65	60	43,336·1	307,917·9
66	61	38,836·9	264,581·8
67	62	34,597·6	225,744·9
68	63	30,618·4	191,147·3
69	64	26,900·5	160,528·9
70	65	23,446·0	133,628·4
71	66	20,256·9	110,182·4
72	67	17,334·8	89,925·5
73	68	14,680·1	72,590·7
74	69	12,291·7	57,910·6
75	70	10,166·0	45,618·9
76	71	8,296·74	35,452·94
77	72	6,674·58	27,156·20
78	73	5,287·16	20,481·62
79	74	4,119·13	15,194·46
80	75	3,152·47	11,075·33
81	76	2,367·13	7,922·86
82	77	1,741·62	5,555·73
83	78	1,253·92	3,814·11
84	79	882·192	2,560·192
85	80	605·639	1,678·000
86	81	405·115	1,072·361
87	82	263·628	667·246
88	83	166·636	403·618
89	84	102·142	236·982
90	85	60·6143	134·8395
91	86	34·7641	74·2252
92	87	19·2356	39·4611
93	88	10·2497	20·2255
94	89	5·2498	9·9758
95	90	2·5797	4·7260
96	91	1·2137	2·1463
97	92	·5457	·9326
98	93	·2340	·3869
99	94	·0955	·1529
100	95	·0370	·0574
101	96	·0136	·0204
102	97	·0047	·0068
103	98	·0015	·0021
104	99	·0005	·0006
105	100	·0001	·0001
		Difference of Age 102 Years.	
102	0	28·7207	50·0553
103	1	12·5719	21·3346
104	2	5·9545	8·7627
105	3	2·8082	2·8082

JOINT LIVES:—Two Males.

Difference of Age 6 Years.
Difference of Age 101 Years.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
		Difference of Age 6 Years.	
6	0	1,710,886	27,533,825
7	1	1,374,280	25,822,939
8	2	1,237,030	24,448,659
9	3	1,149,527	23,211,629
10	4	1,082,387	22,062,102
11	5	1,026,339	20,979,715
12	6	977,929	19,953,376
13	7	934,694	18,975,447
14	8	894,924	18,040,753
15	9	858,039	17,145,829
16	10	823,382	16,287,790
17	11	790,435	15,464,408
18	12	758,794	14,673,973
19	13	728,154	13,915,179
20	14	698,298	13,187,025
21	15	669,080	12,488,727
22	16	640,761	11,819,647
23	17	613,247	11,178,886
24	18	586,476	10,565,639
25	19	560,408	9,979,163
26	20	535,027	9,418,755
27	21	510,333	8,883,728
28	22	486,603	8,373,395
29	23	463,809	7,886,792
30	24	441,920	7,422,983
31	25	420,909	6,981,063
32	26	400,743	6,560,154
33	27	381,391	6,159,411
34	28	362,823	5,778,020
35	29	345,007	5,415,197
36	30	327,914	5,070,190
37	31	311,514	4,742,276
38	32	295,777	4,430,762
39	33	280,676	4,134,985
40	34	266,184	3,854,309
41	35	252,275	3,588,125
42	36	238,925	3,335,850
43	37	226,110	3,096,925
44	38	213,809	2,870,815
45	39	202,000	2,657,006
46	40	190,665	2,455,006
47	41	179,784	2,264,341
48	42	169,341	2,084,557
49	43	159,321	1,915,216
50	44	149,708	1,755,895
51	45	140,490	1,606,187
52	46	131,579	1,465,697
53	47	123,033	1,334,118
54	48	114,844	1,211,085
55	49	107,006	1,096,241
56	50	99,507·6	989,234·9
57	51	92,339·4	889,727·3
58	52	85,442·9	797,387·9
59	53	78,852·9	711,945·0
60	54	72,563·2	633,092·1
61	55	66,566·4	560,528·9
62	56	60,855·1	493,962·5
63	57	55,422·1	433,107·4
64	58	50,261·5	377,685·3
65	59	45,368·5	327,423·8
66	60	40,739·9	282,055·3
67	61	36,374·1	241,315·4
68	62	32,270·7	204,941·3
69	63	28,430·7	172,670·6
70	64	24,855·7	144,239·9
71	65	21,547·8	119,384·2
72	66	18,508·5	97,836·4
73	67	15,738·7	79,327·9
74	68	13,237·6	63,589·2
75	69	11,002·4	50,351·6
76	70	9,027·64	39,349·23
77	71	7,305·09	30,321·59
78	72	5,823·34	23,016·50
79	73	4,568·01	17,193·16
80	74	3,521·91	12,625·15
81	75	2,665·62	9,103·24
82	76	1,978·05	6,437·62
83	77	1,437·21	4,459·57
84	78	1,021·08	3,022·36
85	79	708·338	2,001·281
86	80	479·105	1,292·943
87	81	315·483	813·838
88	82	201·931	498·355
89	83	125·434	296·424
90	84	75·4915	170·9897
91	85	43·9455	95·4982
92	86	24·7006	51·5527
93	87	13·3814	26·8521
94	88	6·9742	13·4707
95	89	3·4904	6·4965
96	90	1·6741	3·0061
97	91	·7680	1·3320
98	92	·3363	·5640
99	93	·1403	·2277
100	94	·0556	·0874
101	95	·0209	·0318
102	96	·0074	·0109
103	97	·0025	·0035
104	98	·0008	·0010
105	99	·0002	·0002

Difference of Age 101 Years.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
101	0	52·3646	95·9852
102	1	23·6697	43·6206
103	2	11·5910	19·9509
104	3	5·6589	8·3599
105	4	2·7010	2·7010

JOINT LIVES:—TWO MALES.

Difference of Age 7 Years.

Difference of Age 100 Years.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Difference of Age 7 Years.**	
7	0	1,667,545	26,852,650
8	1	1,341,717	25,185,105
9	2	1,209,575	23,843,388
10	3	1,125,341	22,633,813
11	4	1,060,518	21,508,472
12	5	1,006,164	20,447,954
13	6	958,987	19,441,790
14	7	916,644	18,482,803
15	8	877,515	17,566,159
16	9	841,079	16,688,644
17	10	806,735	15,847,565
18	11	774,009	15,040,830
19	12	742,537	14,266,821
20	13	712,049	13,524,284
21	14	682,354	12,812,235
22	15	653,681	12,129,881
23	16	625,902	11,476,200
24	17	598,922	10,850,298
25	18	572,677	10,251,376
26	19	547,129	9,678,699
27	20	522,258	9,131,570
28	21	498,065	8,609,312
29	22	474,819	8,111,247
30	23	452,490	7,636,428
31	24	431,050	7,183,938
32	25	410,469	6,752,888
33	26	390,716	6,342,419
34	27	371,760	5,951,703
35	28	353,570	5,579,943
36	29	336,116	5,226,373
37	30	319,369	4,890,257
38	31	303,299	4,570,888
39	32	287,879	4,267,589
40	33	273,080	3,979,710
41	34	258,877	3,706,630
42	35	245,245	3,447,753
43	36	232,160	3,202,508
44	37	219,600	2,970,348
45	38	207,542	2,750,748
46	39	195,968	2,543,206
47	40	184,858	2,347,238
48	41	174,195	2,162,380
49	42	163,963	1,988,185
50	43	154,146	1,824,222
51	44	144,732	1,670,076
52	45	135,630	1,525,344
53	46	126,897	1,389,714
54	47	118,529	1,262,817
55	48	110,516	1,144,288
56	49	102,848	1,033,772
57	50	95,514·3	930,924·2
58	51	88,504·6	835,409·9
59	52	81,762·2	746,905·3
60	53	75,320·5	665,143·1
61	54	69,173·7	589,822·6
62	55	63,315·5	520,648·9
63	56	57,739·3	457,333·4
64	57	52,439·3	399,594·1
65	58	47,410·9	347,154·8
66	59	42,650·6	299,743·9
67	60	38,156·4	257,093·3
68	61	33,927·6	218,936·9
69	62	29,964·9	185,009·3
70	63	26,269·5	155,044·4
71	64	22,843·3	128,774·9
72	65	19,688·0	105,931·6
73	66	16,804·3	86,243·6
74	67	14,192·1	69,439·3
75	68	11,849·0	55,247·2
76	69	9,770·32	43,398·17
77	70	7,948·63	33,627·85
78	71	6,373·44	25,679·22
79	72	5,031·26	19,305·78
80	73	3,905·71	14,274·52
81	74	2,978·01	10,368·81
82	75	2,227·48	7,390·80
83	76	1,632·31	5,163·32
84	77	1,170·34	3,531·01
85	78	819·854	2,360·674
86	79	560·347	1,540·820
87	80	373·103	980·473
88	81	241·651	607·370
89	82	152·002	365·719
90	83	92·7060	213·7170
91	84	54·7315	121·0110
92	85	31·2242	66·2795
93	86	17·1832	35·0553
94	87	9·1051	17·8721
95	88	4·6369	8·7670
96	89	2·2651	4·1301
97	90	1·0594	1·8650
98	91	·4734	·8056
99	92	·2017	·3322
100	93	·0818	·1305
101	94	·0315	·0487
102	95	·0115	·0172
103	96	·0040	·0057
104	97	·0013	·0017
105	98	·0004	·0004
		Difference of Age 100 Years.	
100	0	92·5669	176·6178
101	1	43·1555	84·0509
102	2	21·8229	40·8954
103	3	11·0156	19·0725
104	4	5·4429	8·0569
105	5	2·6140	2·6140

JOINT LIVES:—Two Males.

Difference of Age 8 Years.

Difference of Age 99 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 8 Years.**	
8	0	1,628,033	26,188,853
9	1	1,311,939	24,560,820
10	2	1,184,125	23,248,881
11	3	1,102,604	22,064,756
12	4	1,039,671	20,962,152
13	5	986,675	19,922,481
14	6	940,468	18,935,806
15	7	898,812	17,995,338
16	8	860,170	17,096,526
17	9	824,074	16,236,356
18	10	789,969	15,412,282
19	11	757,426	14,622,313
20	12	726,113	13,864,887
21	13	695,790	13,138,774
22	14	666,650	12,442,984
23	15	638,524	11,776,334
24	16	611,282	11,137,810
25	17	584,831	10,526,528
26	18	559,107	9,941,697
27	19	534,071	9,382,590
28	20	509,703	8,848,519
29	21	486,004	8,338,816
30	22	463,232	7,852,812
31	23	441,360	7,389,580
32	24	420,359	6,948,220
33	25	400,199	6,527,861
34	26	380,849	6,127,662
35	27	362,279	5,746,813
36	28	344,458	5,384,534
37	29	327,358	5,040,076
38	30	310,948	4,712,718
39	31	295,200	4,401,770
40	32	280,088	4,106,570
41	33	265,584	3,826,482
42	34	251,663	3,560,898
43	35	238,301	3,309,235
44	36	225,475	3,070,934
45	37	213,163	2,845,459
46	38	201,344	2,632,296
47	39	190,000	2,430,952
48	40	179,112	2,240,952
49	41	168,663	2,061,840
50	42	158,638	1,893,177
51	43	149,023	1,734,539
52	44	139,725	1,585,516
53	45	130,804	1,445,791
54	46	122,252	1,314,987
55	47	114,061	1,192,735
56	48	106,221	1,078,674
57	49	98,720·3	972,452·6
58	50	91,547·5	873,732·3
59	51	84,691·9	782,184·8
60	52	78,099·4	697,492·9
61	53	71,802·2	619,393·5
62	54	65,795·4	547,591·3
63	55	60,073·7	481,795·9
64	56	54,631·7	421,722·2
65	57	49,465·2	367,090·5
66	58	44,570·6	317,625·3
67	59	39,945·9	273,054·7
68	60	35,590·1	233,108·8
69	61	31,503·5	197,518·7
70	62	27,687·1	166,015·2
71	63	24,142·7	138,328·1
72	64	20,871·7	114,185·4
73	65	17,875·2	93,313·7
74	66	15,153·0	75,438·5
75	67	12,703·4	60,285·5
76	68	10,522·1	47,582·1
77	69	8,602·54	37,060·00
78	70	6,934·91	28,457·46
79	71	5,506·53	21,522·55
80	72	4,301·80	16,016·02
81	73	3,302·54	11,714·22
82	74	2,488·52	8,411·68
83	75	1,838·15	5,923·16
84	76	1,329·21	4,085·01
85	77	939·697	2,755·796
86	78	648·564	1,816·099
87	79	436·370	1,167·535
88	80	285·786	731·165
89	81	181·901	445·379
90	82	112·342	263·478
91	83	67·2121	151·1360
92	84	38·8879	83·9239
93	85	21·7213	45·0360
94	86	11·6919	23·3147
95	87	6·0536	11·6228
96	88	3·0092	5·5692
97	89	1·4334	2·5600
98	90	·6529	1·1266
99	91	·2839	·4737
100	92	·1175	·1898
101	93	·0463	·0723
102	94	·0173	·0260
103	95	·0061	·0087
104	96	·0020	·0026
105	97	·0006	·0006

Difference of Age 99 Years.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
99	0	158·840	314·059
100	1	76·2875	155·2185
101	2	39·7883	78·9310
102	3	20·7395	39·1427
103	4	10·5951	18·4032
104	5	5·2675	7·8081
105	6	2·5406	2·5406

JOINT LIVES :—Two Males.

Difference of Age 9 Years.

Difference of Age 98 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 9 Years.**	
9	0	1,591,900	25,539,717
10	1	1,284,335	23,947,817
11	2	1,160,200	22,663,482
12	3	1,080,930	21,503,282
13	4	1,019,534	20,422,352
14	5	967,621	19,402,818
15	6	922,173	18,435,197
16	7	881,046	17,513,024
17	8	842,778	16,631,978
18	9	806,948	15,789,200
19	10	773,045	14,982,252
20	11	740,672	14,209,207
21	12	709,534	13,468,535
22	13	679,778	12,759,001
23	14	651,191	12,079,223
24	15	623,608	11,428,032
25	16	596,900	10,804,424
26	17	570,973	10,207,524
27	18	545,764	9,636,551
28	19	521,232	9,090,787
29	20	497,360	8,569,555
30	21	474,144	8,072,195
31	22	451,838	7,598,051
32	23	430,413	7,146,213
33	24	409,841	6,715,800
34	25	390,092	6,305,959
35	26	371,136	5,915,867
36	27	352,942	5,544,731
37	28	335,482	5,191,789
38	29	318,726	4,856,307
39	30	302,645	4,537,581
40	31	287,212	4,234,936
41	32	272,400	3,947,724
42	33	258,184	3,675,324
43	34	244,538	3,417,140
44	35	231,440	3,172,602
45	36	218,867	2,941,162
46	37	206,797	2,722,295
47	38	195,213	2,515,498
48	39	184,094	2,320,285
49	40	173,423	2,136,191
50	41	163,185	1,962,768
51	42	153,365	1,799,583
52	43	143,868	1,646,218
53	44	134,753	1,502,350
54	45	126,015	1,367,597
55	46	117,644	1,241,582
56	47	109,629	1,123,938
57	48	101,958	1,014,309
58	49	94,620·5	912,350·8
59	50	87,603·8	817,730·3
60	51	80,897·9	730,126·5
61	52	74,451·3	649,228·6
62	53	68,295·5	574,777·3
63	54	62,426·6	506,481·8

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 9 Years.**	
64	55	56,840·5	444,055·2
65	56	51,533·3	387,214·7
66	57	46,501·8	335,681·4
67	58	41,744·1	289,179·6
68	59	37,259·2	247,435·5
69	60	33,047·1	210,176·3
70	61	29,108·8	177,129·2
71	62	25,445·5	148,020·4
72	63	22,058·9	122,574·9
73	64	18,950·0	100,516·0
74	65	16,118·7	81,566·0
75	66	13,563·5	65,447·3
76	67	11,280·9	51,883·8
77	68	9,264·50	40,602·94
78	69	7,505·43	31,338·44
79	70	5,991·62	23,833·01
80	71	4,708·16	17,841·39
81	72	3,637·45	13,133·23
82	73	2,759·70	9,495·78
83	74	2,053·56	6,736·08
84	75	1,496·82	4,682·52
85	76	1,067·26	3,185·70
86	77	743·369	2,118·435
87	78	505·070	1,375·066
88	79	334·246	869·996
89	80	215·123	535·750
90	81	134·439	320·627
91	82	81·4482	186·1879
92	83	47·7556	104·7397
93	84	27·0526	56·9841
94	85	14·7798	29·9315
95	86	7·7734	15·1517
96	87	3·9286	7·3783
97	88	1·9042	3·4497
98	89	·8834	1·5455
99	90	·3915	·6621
100	91	·1654	·2706
101	92	·0665	·1052
102	93	·0254	·0387
103	94	·0092	·0133
104	95	·0031	·0041
105	96	·0010	·0010
		Difference of Age 98 Years.	
98	0	264·883	541·735
99	1	130·906	276·852
100	2	70·3352	145·9458
101	3	37·8131	75·6106
102	4	19·9479	37·7975
103	5	10·2536	17·8496
104	6	5·1197	7·5960
105	7	2·4763	2·4763

JOINT LIVES :—TWO MALES.

Difference of Age 10 Years.

Difference of Age 97 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Difference of Age 10 Years.**	
10	0	1,558,406	24,902,754
11	1	1,258,386	23,344,348
12	2	1,137,394	22,085,962
13	3	1,059,993	20,948,568
14	4	999,845	19,888,575
15	5	948,797	18,888,730
16	6	903,945	17,939,933
17	7	863,232	17,035,988
18	8	825,264	16,172,756
19	9	789,659	15,347,492
20	10	755,946	14,557,833
21	11	723,761	13,801,887
22	12	693,204	13,078,126
23	13	664,015	12,384,922
24	14	635,980	11,720,907
25	15	608,936	11,084,927
26	16	582,756	10,475,991
27	17	557,346	9,893,235
28	18	532,644	9,335,889
29	19	508,610	8,803,245
30	20	485,223	8,294,635
31	21	462,481	7,809,412
32	22	440,631	7,346,931
33	23	419,644	6,906,300
34	24	399,491	6,486,656
35	25	380,144	6,087,165
36	26	361,572	5,707,021
37	27	343,745	5,345,449
38	28	326,636	5,001,704
39	29	310,215	4,675,068
40	30	294,455	4,364,853
41	31	279,328	4,070,398
42	32	264,809	3,791,070
43	33	250,873	3,526,261
44	34	237,497	3,275,388
45	35	224,656	3,037,891
46	36	212,330	2,813,235
47	37	200,500	2,600,905
48	38	189,144	2,400,405
49	39	178,247	2,211,261
50	40	167,791	2,033,014
51	41	157,761	1,865,223
52	42	148,060	1,707,462
53	43	138,749	1,559,402
54	44	129,820	1,420,653
55	45	121,266	1,290,833
56	46	113,073	1,169,567
57	47	105,230	1,056,494
58	48	97,724·1	951,263·6
59	49	90,544·4	853,539·5
60	50	83,679·3	762,995·1
61	51	77,119·1	679,315·8
62	52	70,815·2	602,196·7
63	53	64,798·7	531,381·5
64	54	59,066·9	466,582·8
65	55	53,616·7	407,515·9
66	56	48,446·0	353,899·2
67	57	43,552·9	305,453·2
68	58	38,936·5	261,900·3
69	59	34,597·0	222,963·8
70	60	30,535·1	188,366·8
71	61	26,752·0	157,831·7
72	62	23,249·3	131,079·7
73	63	20,027·9	107,830·4
74	64	17,087·8	87,802·5
75	65	14,427·9	70,714·7
76	66	12,044·7	56,286·8
77	67	9,932·53	44,242·06
78	68	8,082·96	34,309·53
79	69	6,484·54	26,226·57
80	70	5,122·93	19,742·03
81	71	3,981·06	14,619·10
82	72	3,039·57	10,638·04
83	73	2,277·34	7,598·47
84	74	1,672·24	5,321·13
85	75	1,201·84	3,648·89
86	76	844·280	2,447·050
87	77	578·899	1,602·770
88	78	386·868	1,023·871
89	79	251·602	637·003
90	80	158·994	385·401
91	81	97·4690	226·4071
92	82	57·8706	128·9381
93	83	33·2215	71·0675
94	84	18·4073	37·8460
95	85	9·8265	19·4387
96	86	5·0447	9·6122
97	87	2·4860	4·5675
98	88	1·1736	2·0815
99	89	·5298	·9079
100	90	·2282	·3781
101	91	·0936	·1499
102	92	·0365	·0563
103	93	·0135	·0198
104	94	·0047	·0063
105	95	·0016	·0016
		Difference of Age 97 Years.	
97	0	429·765	908·648
98	1	218·299	478·883
99	2	120·692	260·584
100	3	66·8435	139·8917
101	4	36·3697	73·0482
102	5	19·3050	36·6785
103	6	9·9659	17·3735
104	7	4·9900	7·4076
105	8	2·4176	2·4176

JOINT LIVES:—Two Males.

Difference of Age 11 Years.

Difference of Age 96 Years.

Difference of Age 11 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
11	0	1,526,919	24,276,033
12	1	1,233,650	22,749,114
13	2	1,115,364	21,515,464
14	3	1,039,523	20,400,100
15	4	980,394	19,360,577
16	5	930,043	18,380,183
17	6	885,668	17,450,140
18	7	845,293	16,564,472
19	8	807,583	15,719,179
20	9	772,193	14,911,596
21	10	738,685	14,139,403
22	11	707,104	13,400,718
23	12	677,130	12,693,614
24	13	648,504	12,016,484
25	14	621,017	11,367,980
26	15	594,507	10,746,963
27	16	568,848	10,152,456
28	17	543,948	9,583,608
29	18	519,745	9,039,660
30	19	496,198	8,519,915
31	20	473,288	8,023,717
32	21	451,011	7,550,429
33	22	429,606	7,099,418
34	23	409,046	6,669,812
35	24	389,303	6,260,766
36	25	370,347	5,871,463
37	26	352,149	5,501,116
38	27	334,681	5,148,967
39	28	317,914	4,814,286
40	29	301,820	4,496,372
41	30	286,372	4,194,552
42	31	271,544	3,908,180
43	32	257,312	3,636,636
44	33	243,650	3,379,324
45	34	230,535	3,135,674
46	35	217,947	2,905,139
47	36	205,864	2,687,192
48	37	194,267	2,481,328
49	38	183,137	2,287,061
50	39	172,458	2,103,924
51	40	162,214	1,931,466
52	41	152,304	1,769,252
53	42	142,792	1,616,948
54	43	133,669	1,474,156
55	44	124,927	1,340,487
56	45	116,553	1,215,560
57	46	108,535	1,099,007
58	47	100,859	990,472
59	48	93,514·3	889,612·6
60	49	86,488·2	796,098·3
61	50	79,770·6	709,610·1
62	51	73,352·8	629,839·5
63	52	67,189·4	556,486·7
64	53	61,311·3	489,297·3
65	54	55,716·8	427,986·0
66	55	50,404·7	372,269·2
67	56	45,373·8	321,864·5
68	57	40,623·6	276,490·7
69	58	36,154·5	235,867·1
70	59	31,967·1	199,712·6
71	60	28,062·9	167,745·5
72	61	24,443·1	139,682·6
73	62	21,108·6	115,239·5
74	63	18,059·8	94,130·9
75	64	15,295·4	76,071·1
76	65	12,812·2	60,775·7
77	66	10,605·1	47,963·5
78	67	8,665·80	37,358·38
79	68	6,983·52	28,692·58
80	69	5,544·38	21,709·06
81	70	4,331·77	16,164·68
82	71	3,326·70	11,832·91
83	72	2,508·29	8,506·21
84	73	1,854·47	5,997·92
85	74	1,342·69	4,143·45
86	75	950·744	2,800·761
87	76	657·483	1,850·017
88	77	443·419	1,192·534
89	78	291·212	749·115
90	79	185·954	457·903
91	80	115·271	271·949
92	81	69·2537	156·6779
93	82	40·2580	87·4242
94	83	22·6048	47·1662
95	84	12·2383	24·5614
96	85	6·3771	12·3231
97	86	3·1923	5·9460
98	87	1·5322	2·7537
99	88	·7038	1·2215
100	89	·3087	·5177
101	90	·1291	·2090
102	91	·0513	·0799
103	92	·0194	·0286
104	93	·0069	·0092
105	94	·0023	·0023

Difference of Age 96 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
96	0	679·158	1,484·511
97	1	354·184	805·353
98	2	201·267	451·169
99	3	114·700	249·902
100	4	64·2921	135·2022
101	5	35·1976	70·9101
102	6	18·7633	35·7125
103	7	9·7134	16·9492
104	8	4·8718	7·2358
105	9	2·3640	2·3640

JOINT LIVES:—TWO MALES.

Difference of Age 12 Years.

Difference of Age 95 Years.

Ages x	Ages y	$D_{x, y}$	$N_{x, y}$
		Difference of Age 12 Years.	
12	0	1,496,904	23,658,115
13	1	1,209,755	22,161,211
14	2	1,093,825	20,951,456
15	3	1,019,301	19,857,631
16	4	961,016	18,838,330
17	5	911,239	17,877,314
18	6	867,263	16,966,075
19	7	827,182	16,098,812
20	8	789,720	15,271,630
21	9	754,562	14,481,910
22	10	721,685	13,727,348
23	11	690,707	13,005,663
24	12	661,313	12,314,956
25	13	633,246	11,653,643
26	14	606,301	11,020,397
27	15	580,318	10,414,096
28	16	555,173	9,833,778
29	17	530,775	9,278,605
30	18	507,062	8,747,830
31	19	483,993	8,240,768
32	20	461,549	7,756,775
33	21	439,726	7,295,226
34	22	418,757	6,855,500
35	23	398,615	6,436,743
36	24	379,271	6,038,128
37	25	360,697	5,658,857
38	26	342,864	5,298,160
39	27	325,744	4,955,296
40	28	309,310	4,629,552
41	29	293,535	4,320,242
42	30	278,392	4,026,707
43	31	263,856	3,748,315
44	32	249,902	3,484,459
45	33	236,508	3,234,557
46	34	223,651	2,998,049
47	35	211,310	2,774,398
48	36	199,465	2,563,088
49	37	188,097	2,363,623
50	38	177,190	2,175,526
51	39	166,726	1,998,336
52	40	156,602	1,831,610
53	41	146,885	1,675,008
54	42	137,564	1,528,123
55	43	128,631	1,390,559
56	44	120,073	1,261,928
57	45	111,876	1,141,855
58	46	104,027	1,029,979
59	47	96,514·5	925,952·3
60	48	89,325·1	829,437·8
61	49	82,448·2	740,112·7
62	50	75,874·8	657,664·5
63	51	69,597·0	581,789·7
64	52	63,573·3	512,192·7
65	53	57,834·0	448,619·4
66	54	52,378·9	390,785·4
67	55	47,208·2	338,406·5
68	56	42,322·1	291,198·3
69	57	37,721·0	248,876·2
70	58	33,406·2	211,155·2
71	59	29,379·0	177,749·0
72	60	25,640·8	148,370·0
73	61	22,192·5	122,729·2
74	62	19,034·4	100,536·7
75	63	16,165·4	81,502·3
76	64	13,582·6	65,336·9
77	65	11,280·9	51,754·3
78	66	9,252·56	40,473·38
79	67	7,487·08	31,220·82
80	68	5,971·01	23,733·74
81	69	4,688·14	17,762·73
82	70	3,619·77	13,074·59
83	71	2,745·24	9,454·82
84	72	2,042·53	6,709·58
85	73	1,489·00	4,667·05
86	74	1,062·16	3,178·05
87	75	740·393	2,115·893
88	76	503·612	1,375·500
89	77	333·780	871·888
90	78	215·230	538·108
91	79	134·817	322·878
92	80	81·9023	188·0610
93	81	48·1768	106·1587
94	82	27·3927	57·9819
95	83	15·0290	30·5892
96	84	7·9423	15·5602
97	85	4·0354	7·6179
98	86	1·9675	3·5825
99	87	·9188	1·6150
100	88	·4101	·6962
101	89	·1746	·2861
102	90	·0708	·1115
103	91	·0273	·0407
104	92	·0100	·0134
105	93	·0034	·0034

Difference of Age 95 Years.

Ages x	Ages y	$D_{x, y}$	$N_{x, y}$
95	0	1,046·52	2,365·66
96	1	559·717	1,319·142
97	2	326·549	759·425
98	3	191·275	432·876
99	4	110·322	241·601
100	5	62·2200	131·2789
101	6	34·2099	69·0589
102	7	18·2879	34·8490
103	8	9·4833	16·5611
104	9	4·7636	7·0778
105	10	2·3142	2·3142

JOINT LIVES :—Two Males.

Difference of Age 13 Years.

Difference of Age 94 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Difference of Age 13 Years.**	
13	0	1,467,910	23,047,961
14	1	1,186,393	21,580,051
15	2	1,072,546	20,393,658
16	3	999,153	19,321,112
17	4	941,585	18,321,959
18	5	892,302	17,380,374
19	6	848,682	16,488,072
20	7	808,886	15,639,390
21	8	771,689	14,830,504
22	9	737,196	14,058,815
23	10	704,950	13,321,619
24	11	674,573	12,616,669
25	12	645,754	11,942,096
26	13	618,240	11,296,342
27	14	591,832	10,678,102
28	15	566,368	10,086,270
29	16	541,729	9,519,902
30	17	517,823	8,978,173
31	18	494,590	8,460,350
32	19	471,989	7,965,760
33	20	450,001	7,493,771
34	21	428,621	7,043,770
35	22	408,077	6,615,149
36	23	388,342	6,207,072
37	24	369,387	5,818,730
38	25	351,185	5,449,343
39	26	333,708	5,098,158
40	27	316,929	4,764,450
41	28	300,820	4,447,521
42	29	285,355	4,146,701
43	30	270,510	3,861,346
44	31	256,258	3,590,836
45	32	242,578	3,334,578
46	33	229,445	3,092,000
47	34	216,840	2,862,555
48	35	204,741	2,645,715
49	36	193,130	2,440,974
50	37	181,988	2,247,844
51	38	171,300	2,065,856
52	39	160,958	1,894,556
53	40	151,030	1,733,598
54	41	141,508	1,582,568
55	42	132,379	1,441,060
56	43	123,633	1,308,681
57	44	115,254	1,185,048
58	45	107,230	1,069,794
59	46	99,546·1	962,564·0
60	47	92,190·9	863,017·9
61	48	85,152·6	770,827·0
62	49	78,421·6	685,674·4
63	50	71,989·9	607,252·8
64	51	65,851·3	535,262·9
65	52	59,967·7	469,411·6
66	53	54,369·3	409,443·9
67	54	49,057·3	355,074·6
68	55	44,033·1	306,017·3
69	56	39,298·1	261,984·2
70	57	34,853·7	222,686·1
71	58	30,701·6	187,832·4
72	59	26,843·3	157,130·8
73	60	23,279·9	130,287·5
74	61	20,011·7	107,007·6
75	62	17,037·7	86,995·9
76	63	14,355·2	69,958·2
77	64	11,959·1	55,603·0
78	65	9,842·18	43,643·92
79	66	7,994·03	33,801·74
80	67	6,401·57	25,807·71
81	68	5,048·88	19,406·14
82	69	3,917·55	14,357·26
83	70	2,987·08	10,439·71
84	71	2,235·48	7,452·63
85	72	1,640·01	5,217·15
86	73	1,177·91	3,577·14
87	74	827·160	2,399·226
88	75	567·118	1,572·066
89	76	379·090	1,004·948
90	77	246·691	625·858
91	78	156·042	379·167
92	79	95·7905	223·1254
93	80	56·9758	127·3349
94	81	32·7808	70·3591
95	82	18·2122	37·5783
96	83	9·7534	19·3661
97	84	5·0258	9·6127
98	85	2·4872	4·5869
99	86	1·1799	2·0997
100	87	·5355	·9198
101	88	·2320	·3843
102	89	·0958	·1523
103	90	·0376	·0565
104	91	·0140	·0189
105	92	·0049	·0049

Difference of Age 94 Years.

x	y	$D_{x, y}$	$N_{x, y}$
94	0	1,574·04	3,681·51
95	1	862·469	2,107·468
96	2	516·045	1,244·999
97	3	310·338	728·954
98	4	183·974	418·616
99	5	106·766	234·642
100	6	60·4740	127·8755
101	7	33·3432	67·4015
102	8	17·8546	34·0583
103	9	9·2728	16·2037
104	10	4·6634	6·9309
105	11	2·2675	2·2675

JOINT LIVES:—TWO MALES.

Difference of Age 14 Years.

Difference of Age 93 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 14 Years.**	
14	0	1,439,563	22,444,899
15	1	1,163,313	21,005,336
16	2	1,051,346	19,842,023
17	3	978,952	18,790,677
18	4	922,018	17,811,725
19	5	873,184	16,889,707
20	6	829,910	16,016,523
21	7	790,417	15,186,613
22	8	753,929	14,396,196
23	9	720,102	13,642,267
24	10	688,483	12,922,165
25	11	658,702	12,233,682
26	12	630,452	11,574,980
27	13	603,486	10,944,528
28	14	577,605	10,341,042
29	15	552,652	9,763,437
30	16	528,509	9,210,785
31	17	505,086	8,682,276
32	18	482,322	8,177,190
33	19	460,179	7,694,868
34	20	438,637	7,234,689
35	21	417,690	6,796,052
36	22	397,561	6,378,362
37	23	378,222	5,980,801
38	24	359,647	5,602,579
39	25	341,808	5,242,932
40	26	324,678	4,901,124
41	27	308,230	4,576,446
42	28	292,437	4,268,216
43	29	277,276	3,975,779
44	30	262,720	3,698,503
45	31	248,747	3,435,783
46	32	235,333	3,187,036
47	33	222,458	2,951,703
48	34	210,099	2,729,245
49	35	198,239	2,519,146
50	36	186,858	2,320,907
51	37	175,939	2,134,049
52	38	165,374	1,958,110
53	39	155,231	1,792,736
54	40	145,501	1,637,505
55	41	136,174	1,492,004
56	42	127,235	1,355,830
57	43	118,671	1,228,595
58	44	110,468	1,109,924
59	45	102,610	999,456
60	46	95,086·7	896,845·7
61	47	87,884·6	801,759·0
62	48	80,993·9	713,874·4
63	49	74,406·4	632,880·5
64	50	68,115·4	558,474·1
65	51	62,116·5	490,358·7
66	52	56,375·2	428,242·2
67	53	50,921·4	371,867·0
68	54	45,757·9	320,945·6
69	55	40,886·9	275,187·7
70	56	36,310·9	234,300·8
71	57	32,031·9	197,989·9
72	58	28,051·7	165,958·0
73	59	24,371·7	137,906·3
74	60	20,992·3	113,534·6
75	61	17,912·5	92,542·3
76	62	15,129·8	74,629·8
77	63	12,639·4	59,500·0
78	64	10,434·0	46,860·6
79	65	8,503·45	36,426·60
80	66	6,835·01	27,923·15
81	67	5,412·95	21,088·14
82	68	4,219·01	15,675·19
83	69	3,232·82	11,456·18
84	70	2,432·41	8,223·36
85	71	1,794·93	5,790·95
86	72	1,297·37	3,996·02
87	73	917·299	2,698·649
88	74	633·579	1,781·350
89	75	426·894	1,147·771
90	76	280·179	720·877
91	77	178·852	440·698
92	78	110·871	261·846
93	79	66·6372	150·9748
94	80	38·7679	84·3376
95	81	21·7946	45·5697
96	82	11·8192	23·7751
97	83	6·1718	11·9559
98	84	3·0976	5·7841
99	85	1·4915	2·6865
100	86	·6876	1·1950
101	87	·3029	·5074
102	88	·1273	·2045
103	89	·0509	·0772
104	90	·0193	·0263
105	91	·0070	·0070

Difference of Age 93 Years.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
93	0	2,313·32	5,601·27
94	1	1,297·22	3,287·95
95	2	795·175	1,990·733
96	3	490·427	1,195·558
97	4	298·492	705·131
98	5	178·045	406·639
99	6	103·770	228·594
100	7	58·9421	124·8235
101	8	32·5532	65·8814
102	9	17·4584	33·3282
103	10	9·0777	15·8698
104	11	4·5692	6·7921
105	12	2·2229	2·2229

JOINT LIVES:—Two Males.

Difference of Age 15 Years.

Difference of Age 92 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
		Difference of Age 15 Years.	
15	0	1,411,558	21,848,556
16	1	1,140,319	20,436,998
17	2	1,030,089	19,296,679
18	3	958,608	18,266,590
19	4	902,264	17,307,982
20	5	853,871	16,405,718
21	6	810,961	15,551,847
22	7	772,226	14,740,886
23	8	736,447	13,968,660
24	9	703,280	13,232,213
25	10	672,285	12,528,933
26	11	643,093	11,856,648
27	12	615,406	11,213,555
28	13	588,979	10,598,149
29	14	563,617	10,009,170
30	15	539,166	9,445,553
31	16	515,509	8,906,387
32	17	492,559	8,390,878
33	18	470,254	7,898,319
34	19	448,558	7,428,065
35	20	427,450	6,979,507
36	21	406,926	6,552,057
37	22	387,201	6,145,131
38	23	368,249	5,757,930
39	24	350,044	5,389,681
40	25	332,558	5,039,637
41	26	315,766	4,707,079
42	27	299,640	4,391,313
43	28	284,157	4,091,673
44	29	269,292	3,807,516
45	30	255,020	3,538,224
46	31	241,319	3,283,204
47	32	228,167	3,041,885
48	33	215,542	2,813,718
49	34	203,427	2,598,176
50	35	191,801	2,394,749
51	36	180,647	2,202,948
52	37	169,853	2,022,301
53	38	159,490	1,852,448
54	39	149,549	1,692,958
55	40	140,017	1,543,409
56	41	130,882	1,403,392
57	42	122,129	1,272,510
58	43	113,743	1,150,381
59	44	105,709	1,036,638
60	45	98,013·7	930,929·1
61	46	90,645·1	832,915·4
62	47	83,592·5	742,270·3
63	48	76,847·0	658,677·8
64	49	70,401·8	581,830·8
65	50	64,252·2	511,429·0
66	51	58,395·3	447,176·8
67	52	52,800·1	388,781·5
68	53	47,496·6	335,981·4
69	54	42,488·4	288,484·8
70	55	37,778·9	245,996·4
71	56	33,371·1	208,217·5
72	57	29,267·2	174,846·4
73	58	25,468·9	145,579·2
74	59	21,976·8	120,110·3
75	60	18,790·2	98,133·5
76	61	15,906·7	79,343·3
77	62	13,321·5	63,436·6
78	63	11,027·4	50,115·1
79	64	9,014·73	39,087·70
80	65	7,270·58	30,072·97
81	66	5,779·45	22,802·39
82	67	4,523·23	17,022·94
83	68	3,481·58	12,499·71
84	69	2,632·52	9,018·13
85	70	1,953·05	6,385·61
86	71	1,419·92	4,432·56
87	72	1,010·32	3,012·64
88	73	702·623	2,002·320
89	74	476·922	1,299·697
90	75	315·510	822·775
91	76	203·130	507·265
92	77	127·078	304·135
93	78	77·1281	177·0572
94	79	45·3418	99·9291
95	80	25·7751	54·5873
96	81	14·1440	28·8122
97	82	7·4791	14·6682
98	83	3·8040	7·1891
99	84	1·8575	3·3851
100	85	·8692	1·5276
101	86	·3890	·6584
102	87	·1661	·2694
103	88	·0676	·1033
104	89	·0261	·0357
105	90	·0096	·0096

Difference of Age 92 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
92	0	3,325·37	8,340·35
93	1	1,906·48	5,014·98
94	2	1,196·01	3,108·50
95	3	755·700	1,912·492
96	4	471·708	1,156·792
97	5	288·872	685·084
98	6	173·049	396·212
99	7	101·142	223·163
100	8	57·5455	122·0207
101	9	31·8307	64·4752
102	10	17·0910	32·6445
103	11	8·8943	15·5535
104	12	4·4794	6·6592
105	13	2·1798	2·1798

JOINT LIVES:—Two Males.

Difference of Age 16 Years.

Difference of Age 91 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 16 Years.**	
16	0	1,383,657	21,258,800
17	1	1,117,264	19,875,143
18	2	1,008,682	18,757,879
19	3	938,070	17,749,197
20	4	882,307	16,811,127
21	5	834,374	15,928,820
22	6	792,297	15,094,446
23	7	754,320	14,302,149
24	8	719,244	13,547,829
25	9	686,734	12,828,585
26	10	656,354	12,141,851
27	11	627,745	11,485,497
28	12	600,612	10,857,752
29	13	574,715	10,257,140
30	14	549,863	9,682,425
31	15	525,904	9,132,562
32	16	502,723	8,606,658
33	17	480,234	8,103,935
34	18	458,379	7,623,701
35	19	437,118	7,165,322
36	20	416,434	6,728,204
37	21	396,322	6,311,770
38	22	376,991	5,915,448
39	23	358,416	5,538,457
40	24	340,571	5,180,041
41	25	323,429	4,839,470
42	26	306,966	4,516,041
43	27	291,157	4,209,075
44	28	275,975	3,917,918
45	29	261,399	3,641,943
46	30	247,404	3,380,544
47	31	233,970	3,133,140
48	32	221,074	2,899,170
49	33	208,697	2,678,096
50	34	196,820	2,469,399
51	35	185,425	2,272,579
52	36	174,398	2,087,154
53	37	163,809	1,912,756
54	38	153,651	1,748,947
55	39	143,912	1,595,296
56	40	134,576	1,451,384
57	41	125,630	1,316,808
58	42	117,057	1,191,178
59	43	108,843	1,074,121
60	44	100,973	965,278
61	45	93,435·4	864,305·4
62	46	86,218·2	770,870·0
63	47	79,312·5	684,651·8
64	48	72,711·1	605,339·3
65	49	66,408·9	532,628·2
66	50	60,403·0	466,219·3
67	51	54,692·1	405,816·3
68	52	49,248·9	351,124·2
69	53	44,102·9	301,875·3
70	54	39,258·7	257,772·4
71	55	34,720·3	218,513·7
72	56	30,490·8	183,793·4
73	57	26,572·4	153,302·6
74	58	22,966·1	126,730·2
75	59	19,671·5	103,764·1
76	60	16,686·1	84,092·6
77	61	14,005·5	67,406·5
78	62	11,622·5	53,401·0
79	63	9,527·50	41,778·54
80	64	7,707·73	32,251·04
81	65	6,147·75	24,543·31
82	66	4,829·49	18,395·56
83	67	3,732·63	13,566·07
84	68	2,835·09	9,833·44
85	69	2,113·73	6,998·35
86	70	1,545·01	4,884·62
87	71	1,105·76	3,339·61
88	72	773·878	2,233·849
89	73	528·894	1,459·971
90	74	352·484	931·077
91	75	228·745	578·593
92	76	144·328	349·848
93	77	88·4024	205·5201
94	78	52·4801	117·1177
95	79	30·1459	64·6376
96	80	16·7273	34·4917
97	81	8·9502	17·7644
98	82	4·6097	8·8142
99	83	2·2811	4·2045
100	84	1·0825	1·9234
101	85	·4917	·8409
102	86	·2133	·3492
103	87	·0882	·1359
104	88	·0347	·0477
105	89	·0130	·0130
		Difference of Age 91 Years.	
91	0	4,680·19	12,166·06
92	1	2,740·55	7,485·87
93	2	1,757·73	4,745·32
94	3	1,136·63	2,987·59
95	4	726·855	1,850·961
96	5	456·505	1,124·106
97	6	280·766	667·601
98	7	168·665	386·835
99	8	98·7452	218·1700
100	9	56·2683	119·4248
101	10	31·1610	63·1565
102	11	16·7457	31·9955
103	12	8·7195	15·2498
104	13	4·3926	6·5303
105	14	2·1377	2·1377

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Difference of Age 17 Years.

Difference of Age 90 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 17 Years.**	
17	0	1,355,682	20,675,736
18	1	1,094,045	19,320,054
19	2	987,071	18,226,009
20	3	917,321	17,238,938
21	4	862,161	16,321,617
22	5	815,172	15,459,456
23	6	773,925	14,644,284
24	7	736,699	13,870,359
25	8	702,321	13,133,660
26	9	670,461	12,431,339
27	10	640,690	11,760,878
28	11	612,655	11,120,188
29	12	586,067	10,507,533
30	13	560,691	9,921,466
31	14	536,338	9,360,775
32	15	512,860	8,824,437
33	16	490,144	8,311,577
34	17	468,107	7,821,433
35	18	446,689	7,353,326
36	19	425,854	6,906,637
37	20	405,583	6,480,783
38	21	385,872	6,075,200
39	22	366,925	5,689,328
40	23	348,717	5,322,403
41	24	331,222	4,973,686
42	25	314,417	4,642,464
43	26	298,275	4,328,047
44	27	282,773	4,029,772
45	28	267,886	3,746,999
46	29	253,593	3,479,113
47	30	239,870	3,225,520
48	31	226,697	2,985,650
49	32	214,053	2,758,953
50	33	201,919	2,544,900
51	34	190,278	2,342,981
52	35	179,011	2,152,703
53	36	168,192	1,973,692
54	37	157,813	1,805,500
55	38	147,860	1,647,687
56	39	138,319	1,499,827
57	40	129,176	1,361,508
58	41	120,412	1,232,332
59	42	112,014	1,111,920
60	43	103,967	999,906
61	44	96,256·7	895,939·4
62	45	88,872·2	799,682·7
63	46	81,803·7	710,810·5
64	47	75,043·9	629,006·8
65	48	68,587·2	553,962·9
66	49	62,430·5	485,375·7
67	50	56,572·5	422,945·2
68	51	51,013·6	366,372·7
69	52	45,730·0	315,359·1
70	53	40,750·4	269,629·1
71	54	36,080·2	228,878·7

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 17 Years.**	
72	55	31,723·5	192,798·5
73	56	27,683·4	161,075·0
74	57	23,961·2	133,391·6
75	58	20,557·0	109,430·4
76	59	17,468·7	88,873·4
77	60	14,691·7	71,404·7
78	61	12,219·3	56,713·0
79	62	10,041·6	44,493·7
80	63	8,146·15	34,452·09
81	64	6,517·39	26,305·94
82	65	5,137·26	19,788·55
83	66	3,985·36	14,651·29
84	67	3,039·52	10,665·93
85	68	2,276·38	7,626·41
86	69	1,672·11	5,350·03
87	70	1,203·17	3,677·92
88	71	846·981	2,474·751
89	72	582·531	1,627·770
90	73	390·896	1,045·239
91	74	255·552	654·343
92	75	162·528	398·791
93	76	100·403	236·263
94	77	60·1515	135·8599
95	78	34·8918	75·7084
96	79	19·5638	40·8166
97	80	10·5849	21·2528
98	81	5·5164	10·6679
99	82	2·7643	5·1515
100	83	1·3293	2·3872
101	84	·6124	1·0579
102	85	·2697	·4455
103	86	·1133	·1758
104	87	·0453	·0625
105	88	·0172	·0172

		Difference of Age 90 Years.	
90	0	6,455·41	17,401·95
91	1	3,857·11	10,946·54
92	2	2,526·72	7,089·43
93	3	1,670·47	4,562·71
94	4	1,093·25	2,892·24
95	5	703·429	1,798·985
96	6	443·695	1,095·556
97	7	273·653	651·861
98	8	164·668	378·208
99	9	96·5536	213·5404
100	10	55·0844	116·9868
101	11	30·5314	61·9024
102	12	16·4165	31·3710
103	13	8·5506	14·9545
104	14	4·3078	6·4039
105	15	2·0961	2·0961

JOINT LIVES:—TWO MALES.

Difference of Age 18 Years.

Difference of Age 89 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Difference of Age 18 Years.**	
18	0	1,327,509	20,099,601
19	1	1,070,605	18,772,092
20	2	965,238	17,701,487
21	3	896,376	16,736,249
22	4	842,319	15,839,873
23	5	796,269	14,997,554
24	6	755,847	14,201,285
25	7	719,366	13,445,438
26	8	685,679	12,726,072
27	9	654,460	12,040,393
28	10	625,289	11,385,933
29	11	597,818	10,760,644
30	12	571,765	10,162,826
31	13	546,899	9,591,061
32	14	523,035	9,044,162
33	15	500,028	8,521,127
34	16	477,766	8,021,099
35	17	456,169	7,543,333
36	18	435,177	7,087,164
37	19	414,756	6,651,987
38	20	394,888	6,237,231
39	21	375,568	5,842,343
40	22	356,995	5,466,775
41	23	339,145	5,109,780
42	24	321,993	4,770,635
43	25	305,514	4,448,642
44	26	289,686	4,143,128
45	27	274,485	3,853,442
46	28	259,886	3,578,957
47	29	245,870	3,319,071
48	30	232,413	3,073,201
49	31	219,497	2,840,788
50	32	207,101	2,621,291
51	33	195,208	2,414,190
52	34	183,696	2,218,982
53	35	172,641	2,035,286
54	36	162,035	1,862,645
55	37	151,864	1,700,610
56	38	142,114	1,548,746
57	39	132,769	1,406,632
58	40	123,811	1,273,863
59	41	115,225	1,150,052
60	42	106,996	1,034,827
61	43	99,110·5	927,830·5
62	44	91,555·7	828,720·0
63	45	84,321·8	737,164·3
64	46	77,401·1	652,842·5
65	47	70,787·7	575,441·4
66	48	64,478·3	504,653·7
67	49	58,471·5	440,175·4
68	50	52,767·6	381,703·9
69	51	47,368·7	328,936·3
70	52	42,253·9	281,567·6
71	53	37,451·2	239,313·7
72	54	32,966·1	201,862·5
73	55	28,802·6	168,896·4
74	56	24,963·0	140,093·8
75	57	21,447·8	115,130·8
76	58	18,255·1	93,683·0
77	59	15,380·8	75,427·9
78	60	12,818·0	60,047·1
79	61	10,557·2	47,229·1
80	62	8,585·75	36,671·93
81	63	6,888·11	28,086·18
82	64	5,446·14	21,198·07
83	65	4,239·33	15,751·93
84	66	3,245·32	11,512·60
85	67	2,440·52	8,267·28
86	68	1,800·78	5,826·76
87	69	1,302·16	4,025·98
88	70	921·595	2,723·819
89	71	637·559	1,802·224
90	72	430·538	1,164·665
91	73	283·401	734·127
92	74	181·575	450·726
93	75	113·064	269·151
94	76	68·3169	156·0873
95	77	39·9922	87·7704
96	78	22·6438	47·7782
97	79	12·3798	25·1344
98	80	6·5239	12·7546
99	81	3·3080	6·2307
100	82	1·6109	2·9227
101	83	·7520	1·3118
102	84	·3359	·5598
103	85	·1432	·2239
104	86	·0582	·0807
105	87	·0225	·0225

Difference of Age 89 Years.

x	y	$D_{x, y}$	$N_{x, y}$
89	0	8,734·37	24,430·18
90	1	5,320·13	15,695·81
91	2	3,556·15	10,375·68
92	3	2,401·29	6,819·53
93	4	1,606·71	4,418·24
94	5	1,058·01	2,811·53
95	6	683·690	1,753·516
96	7	432·455	1,069·826
97	8	267·169	637·371
98	9	161·014	370·202
99	10	94·5221	209·1876
100	11	53·9715	114·6655
101	12	29·9312	60·6940
102	13	16·0986	30·7628
103	14	8·3855	14·6642
104	15	4·2240	6·2787
105	16	2·0547	2·0547

JOINT LIVES:—TWO MALES.

Difference of Age 19 Years.

Difference of Age 88 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Difference of Age 19 Years.**	
19	0	1,299,067	19,530,787
20	1	1,046,925	18,231,720
21	2	943,199	17,184,795
22	3	875,747	16,241,596
23	4	822,787	15,365,849
24	5	777,669	14,543,062
25	6	738,063	13,765,393
26	7	702,320	13,027,330
27	8	669,315	12,325,010
28	9	638,728	11,655,695
29	10	610,146	11,016,967
30	11	583,230	10,406,821
31	12	557,702	9,823,591
32	13	533,335	9,265,889
33	14	509,948	8,732,554
34	15	487,401	8,222,606
35	16	465,582	7,735,205
36	17	444,413	7,269,623
37	18	423,837	6,825,210
38	19	403,820	6,401,373
39	20	384,343	5,997,553
40	21	365,404	5,613,210
41	22	347,196	5,247,806
42	23	329,694	4,900,610
43	24	312,876	4,570,916
44	25	296,717	4,258,040
45	26	281,195	3,961,323
46	27	266,288	3,680,128
47	28	251,972	3,413,840
48	29	238,227	3,161,868
49	30	225,032	2,923,641
50	31	212,368	2,698,609
51	32	200,217	2,486,241
52	33	188,455	2,286,024
53	34	177,159	2,097,569
54	35	166,321	1,920,410
55	36	155,928	1,754,089
56	37	145,963	1,598,161
57	38	136,411	1,452,198
58	39	127,255	1,315,787
59	40	118,477	1,188,532
60	41	110,063	1,070,055
61	42	101,999	959,992
62	43	94,270·2	857,992·9
63	44	86,868·0	763,722·7
64	45	79,783·7	676,854·7
65	46	73,011·2	597,071·0
66	47	66,546·9	524,059·8
67	48	60,389·4	457,512·9
68	49	54,538·8	397,123·5
69	50	48,997·3	342,584·7
70	51	43,768·0	293,587·4
71	52	38,832·9	249,819·4
72	53	34,218·7	210,986·5
73	54	29,930·8	176,767·8
74	55	25,972·3	146,837·0
75	56	22,344·5	120,864·7
76	57	19,046·0	98,520·2
77	58	16,073·2	79,474·2
78	59	13,419·2	63,401·0
79	60	11,074·5	49,981·8
80	61	9,026·59	38,907·30
81	62	7,259·82	29,880·71
82	63	5,755·92	22,620·89
83	64	4,494·22	16,864·97
84	65	3,452·13	12,370·75
85	66	2,605·76	8,918·62
86	67	1,930·63	6,312·86
87	68	1,402·36	4,382·23
88	69	997·413	2,979·872
89	70	693·724	1,982·459
90	71	471·208	1,288·735
91	72	312·141	817·527
92	73	201·362	505·386
93	74	126·314	304·024
94	75	76·9317	177·7102
95	76	45·4210	100·7785
96	77	25·9538	55·3575
97	78	14·3288	29·4037
98	79	7·6302	15·0749
99	80	3·9122	7·4447
100	81	1·9278	3·5325
101	82	·9113	1·6047
102	83	·4125	·6934
103	84	·1784	·2809
104	85	·0736	·1025
105	86	·0289	·0289

Difference of Age 88 Years.

x	y	$D_{x, y}$	$N_{x, y}$
88	0	11,603·4	33,691·7
89	1	7,198·29	22,088·29
90	2	4,905·02	14,890·00
91	3	3,379·62	9,984·98
92	4	2,309·63	6,605·36
93	5	1,554·93	4,295·73
94	6	1,028·32	2,740·80
95	7	666·370	1,712·482
96	8	422·208	1,046·112
97	9	261·240	623·904
98	10	157·626	362·664
99	11	92·6123	205·0380
100	12	52·9105	112·4257
101	13	29·3515	59·5152
102	14	15·7877	30·1637
103	15	8·2223	14·3760
104	16	4·1405	6·1537
105	17	2·0132	2·0132

JOINT LIVES:—Two Males.

Difference of Age 20 Years.

Difference of Age 87 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 20 Years.**	
20	0	1,270,333	18,969,754
21	1	1,023,020	17,699,421
22	2	921,493	16,676,401
23	3	855,439	15,754,908
24	4	803,567	14,899,469
25	5	759,372	14,095,902
26	6	720,574	13,336,530
27	7	685,559	12,615,956
28	8	653,225	11,930,397
29	9	623,259	11,277,172
30	10	595,257	10,653,913
31	11	568,884	10,058,656
32	12	543,869	9,489,772
33	13	519,990	8,945,903
34	14	497,070	8,425,913
35	15	474,970	7,928,843
36	16	453,584	7,453,873
37	17	432,832	7,000,289
38	18	412,661	6,567,457
39	19	393,037	6,154,796
40	20	373,942	5,761,759
41	21	355,374	5,387,817
42	22	337,521	5,032,443
43	23	320,359	4,694,922
44	24	303,867	4,374,563
45	25	288,020	4,070,696
46	26	272,798	3,782,676
47	27	258,178	3,509,878
48	28	244,139	3,251,700
49	29	230,661	3,007,561
50	30	217,724	2,776,900
51	31	205,309	2,559,176
52	32	193,291	2,353,867
53	33	181,749	2,160,576
54	34	170,674	1,978,827
55	35	160,052	1,808,153
56	36	149,869	1,648,101
57	37	140,106	1,498,232
58	38	130,746	1,358,126
59	39	121,773	1,227,380
60	40	113,170	1,105,607
61	41	104,922	992,437
62	42	97,017·1	887,515·0
63	43	89,443·5	790,497·9
64	44	82,192·8	701,054·4
65	45	75,258·7	618,861·6
66	46	68,637·2	543,602·9
67	47	62,326·8	474,965·7
68	48	56,327·8	412,638·9
69	49	50,642·0	356,311·1
70	50	45,272·8	305,669·1
71	51	40,224·4	260,396·3
72	52	35,481·2	220,171·9
73	53	31,068·1	184,690·7
74	54	26,989·6	153,622·6

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 20 Years.**	
75	55	23,247·9	126,633·0
76	56	19,842·3	103,385·1
77	57	16,769·6	83,542·8
78	58	14,023·3	66,773·2
79	59	11,593·9	52,749·9
80	60	9,468·89	41,155·99
81	61	7,632·58	31,687·10
82	62	6,066·53	24,054·52
83	63	4,749·86	17,987·99
84	64	3,659·70	13,238·13
85	65	2,771·82	9,578·43
86	66	2,061·35	6,806·61
87	67	1,503·48	4,745·26
88	68	1,074·16	3,241·78
89	69	750·795	2,167·624
90	70	512·719	1,416·829
91	71	341·627	904·110
92	72	221·783	562·483
93	73	140·079	340·700
94	74	85·9474	200·6207
95	75	51·1487	114·6733
96	76	29·4769	63·5246
97	77	16·4233	34·0477
98	78	8·8315	17·6244
99	79	4·5755	8·7929
100	80	2·2799	4·2174
101	81	1·0905	1·9375
102	82	·4998	·8470
103	83	·2191	·3472
104	84	·0916	·1281
105	85	·0365	·0365

Difference of Age 87 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
87	0	15,148·6	45,683·5
88	1	9,562·75	30,534·92
89	2	6,636·65	20,972·17
90	3	4,661·52	14,335·52
91	4	3,250·62	9,674·00
92	5	2,235·19	6,423·38
93	6	1,511·29	4,188·19
94	7	1,002·27	2,676·90
95	8	650·581	1,674·634
96	9	412·838	1,024·053
97	10	255·743	611·215
98	11	154·441	355·472
99	12	90·7919	201·0308
100	13	51·8857	110·2389
101	14	28·7847	58·3532
102	15	15·4806	29·5685
103	16	8·0598	14·0879
104	17	4·0568	6·0281
105	18	1·9713	1·9713

JOINT LIVES :—TWO MALES.

Difference of Age 21 Years.

Difference of Age 86 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 21 Years.**	
21	0	1,241,328	18,417,052
22	1	999,477	17,175,724
23	2	900,124	16,176,247
24	3	835,457	15,276,123
25	4	784,661	14,440,666
26	5	741,378	13,656,005
27	6	703,377	12,914,627
28	7	669,079	12,211,250
29	8	637,406	11,542,171
30	9	608,050	10,904,765
31	10	580,615	10,296,715
32	11	554,774	9,716,100
33	12	530,261	9,161,326
34	13	506,858	8,631,065
35	14	484,393	8,124,207
36	15	462,730	7,639,814
37	16	441,764	7,177,084
38	17	421,419	6,735,320
39	18	401,642	6,313,901
40	19	382,401	5,912,259
41	20	363,678	5,529,858
42	21	345,471	5,166,180
43	22	327,964	4,820,709
44	23	311,135	4,492,745
45	24	294,960	4,181,610
46	25	279,419	3,886,650
47	26	264,490	3,607,231
48	27	250,152	3,342,741
49	28	236,385	3,092,589
50	29	223,170	2,856,204
51	30	210,487	2,633,034
52	31	198,207	2,422,547
53	32	186,413	2,224,340
54	33	175,096	2,037,927
55	34	164,241	1,862,831
56	35	153,833	1,698,590
57	36	143,854	1,544,757
58	37	134,287	1,400,903
59	38	125,114	1,266,616
60	39	116,318	1,141,502
61	40	107,884	1,025,184
62	41	99,798·1	917,300·2
63	42	92,049·8	817,502·1
64	43	84,629·6	725,452·3
65	44	77,531·1	640,822·7
66	45	70,750·1	563,291·6
67	46	64,284·6	492,541·5
68	47	58,134·9	428,256·9
69	48	52,303·1	370,122·0
70	49	46,792·5	317,818·9
71	50	41,607·4	271,026·4
72	51	36,752·6	229,419·0
73	52	32,214·3	192,666·4
74	53	28,015·1	160,452·1
75	54	24,158·4	132,437·0

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 21 Years.**	
76	55	20,644·6	108,278·6
77	56	17,470·7	87,634·0
78	57	14,630·9	70,163·3
79	58	12,115·8	55,532·4
80	59	9,912·97	43,416·60
81	60	8,006·57	33,503·63
82	61	6,378·02	25,497·06
83	62	5,006·18	19,119·04
84	63	3,867·86	14,112·86
85	64	2,938·48	10,245·00
86	65	2,192·71	7,306·52
87	66	1,605·28	5,113·81
88	67	1,151·62	3,508·53
89	68	808·569	2,356·907
90	69	554·899	1,548·338
91	70	371·723	993·439
92	71	242·733	621·716
93	72	154·284	378·983
94	73	95·3135	224·6991
95	74	57·1428	129·3856
96	75	33·1940	72·2428
97	76	18·6527	39·0488
98	77	10·1224	20·3961
99	78	5·2959	10·2737
100	79	2·6665	4·9778
101	80	1·2897	2·3113
102	81	·5981	1·0216
103	82	·2655	·4235
104	83	·1125	·1580
105	84	·0455	·0455

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 86 Years.**	
86	0	19,452·5	60,953·6
87	1	12,484·5	41,501·1
88	2	8,816·62	29,016·64
89	3	6,307·18	20,200·02
90	4	4,483·59	13,892·84
91	5	3,145·85	9,409·25
92	6	2,172·47	6,263·40
93	7	1,473·01	4,090·93
94	8	978·527	2,617·916
95	9	636·142	1,639·389
96	10	404·151	1,003·247
97	11	250·576	599·096
98	12	151·405	348·520
99	13	89 0333	197·1147
100	14	50·8837	108·0814
101	15	28·2247	57·1977
102	16	15·1746	28·9730
103	17	7·8968	13·7984
104	18	3·9725	5·9016
105	19	1·9291	1·9291

JOINT LIVES:—TWO MALES.

Difference of Age 22 Years.

Difference of Age 85 Years.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Difference of Age 22 Years.**	
22	0	1,212,760	17,873,321
23	1	976,300	16,660,561
24	2	879,098	15,684,261
25	3	815,800	14,805,163
26	4	766,068	13,989,363
27	5	723,685	13,223,295
28	6	686,469	12,499,610
29	7	652,876	11,813,141
30	8	621,852	11,160,265
31	9	593,094	10,538,413
32	10	566,214	9,945,319
33	11	540,893	9,379,105
34	12	516,870	8,838,212
35	13	493,932	8,321,342
36	14	471,910	7,827,410
37	15	450,672	7,355,500
38	16	430,115	6,904,828
39	17	410,166	6,474,713
40	18	390,773	6,064,547
41	19	371,904	5,673,774
42	20	353,544	5,301,870
43	21	335,690	4,948,326
44	22	318,521	4,612,636
45	23	302,015	4,294,115
46	24	286,152	3,992,100
47	25	270,910	3,705,948
48	26	256,268	3,435,038
49	27	242,208	3,178,770
50	28	228,708	2,936,562
51	29	215,752	2,707,854
52	30	203,205	2,492,102
53	31	191,155	2,288,897
54	32	179,589	2,097,742
55	33	168,496	1,918,153
56	34	157,859	1,749,657
57	35	147,659	1,591,798
58	36	137,880	1,444,139
59	37	128,502	1,306,259
60	38	119,509	1,177,757
61	39	110,884	1,058,248
62	40	102,615	947,364
63	41	94,688·3	844,749·2
64	42	87,095·7	750,060·9
65	43	79,829·8	662,965·2
66	44	72,886·4	583,135·4
67	45	66,263·4	510,249·0
68	46	59,961·0	443,985·6
69	47	53,981·1	384,024·6
70	48	48,327·3	330,043·5
71	49	43,004·0	281,716·2
72	50	38,016·3	238,712·2
73	51	33,368·6	200,695·9
74	52	29,048·7	167,327·3
75	53	25,076·4	138,278·6
76	54	21,453·2	113,202·2
77	55	18,177·1	91,749·0
78	56	15,242·6	73,571·9
79	57	12,640·8	58,329·3
80	58	10,359·2	45,688·5
81	59	8,382·07	35,329·33
82	60	6,690·54	26,947·26
83	61	5,263·23	20,256·72
84	62	4,076·59	14,993·49
85	63	3,105·62	10,916·90
86	64	2,324·55	7,811·28
87	65	1,707·57	5,486·73
88	66	1,229·59	3,779·16
89	67	866·872	2,549·565
90	68	597·598	1,682·693
91	69	402·303	1,085·095
92	70	264·117	682·792
93	71	168·859	418·675
94	72	104·979	249·816
95	73	63·3699	144·8372
96	74	37·0840	81·4673
97	75	21·0048	44·3833
98	76	11·4965	23·3785
99	77	6·0700	11·8820
100	78	3·0863	5·8120
101	79	1·5084	2·7257
102	80	·7074	1·2173
103	81	·3177	·5099
104	82	·1364	·1922
105	83	·0558	·0558

Difference of Age 85 Years.

x	y	$D_{x,y}$	$N_{x,y}$
85	0	24,590·0	80,092·4
86	1	16,031·5	55,502·4
87	2	11,510·4	39,470·9
88	3	8,378·93	27,960·50
89	4	6,066·44	19,581·57
90	5	4,339·09	13,515·13
91	6	3,057·57	9,176·04
92	7	2,117·44	6,118·47
93	8	1,438·11	4,001·03
94	9	956·809	2,562·924
95	10	622·757	1,606·115
96	11	395·986	983·358
97	12	245·650	587·372
98	13	148·473	341·722
99	14	87·3139	193·2488
100	15	49·8938	105·9349
101	16	27·6668	56·0411
102	17	14·8678	28·3743
103	18	7·7327	13·5065
104	19	3·8874	5·7738
105	20	1·8864	1·8864

JOINT LIVES:—Two Males.

Difference of Age 23 Years.

Difference of Age 84 Years.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Difference of Age 23 Years.**	
23	0	1,184,638	17,338,489
24	1	953,495	16,153,851
25	2	858,415	15,200,356
26	3	796,469	14,341,941
27	4	747,785	13,545,472
28	5	706,288	12,797,687
29	6	669,844	12,091,399
30	7	636,944	11,421,555
31	8	606,556	10,784,611
32	9	578,384	10,178,055
33	10	552,047	9,599,671
34	11	527,234	9,047,624
35	12	503,688	8,520,390
36	13	481,203	8,016,702
37	14	459,613	7,535,499
38	15	438,788	7,075,886
39	16	418,630	6,637,098
40	17	399,066	6,218,468
41	18	380,046	5,819,402
42	19	361,541	5,439,356
43	20	343,534	5,077,815
44	21	326,024	4,734,281
45	22	309,185	4,408,257
46	23	292,996	4,099,072
47	24	277,437	3,806,076
48	25	262,488	3,528,639
49	26	248,129	3,266,151
50	27	234,342	3,018,022
51	28	221,106	2,783,680
52	29	208,288	2,562,574
53	30	195,975	2,354,286
54	31	184,157	2,158,311
55	32	172,820	1,974,154
56	33	161,949	1,801,334
57	34	151,524	1,639,385
58	35	141,527	1,487,861
59	36	131,940	1,346,334
60	37	122,745	1,214,394
61	38	113,926	1,091,649
62	39	105,469	977,723
63	40	97,360·8	872,253·5
64	41	89,592·2	774,892·7
65	42	82,156·0	685,300·5
66	43	75,047·4	603,144·5
67	44	68,264·3	528,097·1
68	45	61,806·7	459,832·8
69	46	55,676·7	398,026·1
70	47	49,877·8	342,349·4
71	48	44,414·6	292,471·6
72	49	39,292·3	248,057·0
73	50	34,515·9	208,764·7
74	51	30,089·6	174,248·8
75	52	26,001·6	144,159·2
76	53	22,268·4	118,157·6
77	54	18,889·0	95,889·2
78	55	15,858·9	77,000·2
79	56	13,169·3	61,141·3
80	57	10,808·1	47,972·0
81	58	8,759·41	37,163·86
82	59	7,004·32	28,404·45
83	60	5,521·12	21,400·13
84	61	4,285·90	15,879·01
85	62	3,273·21	11,593·11
86	63	2,456·77	8,319·90
87	64	1,810·24	5,863·13
88	65	1,307·95	4,052·89
89	66	925·567	2,744·936
90	67	640·689	1,819·369
91	68	433·260	1,178·680
92	69	285·845	745·420
93	70	183·734	459·575
94	71	114·896	275·841
95	72	69·7964	160·9454
96	73	41·1252	91·1490
97	74	23·4664	50·0238
98	75	12·9462	26·5574
99	76	6·8940	13·6112
100	77	3·5374	6·7172
101	78	1·7459	3·1798
102	79	·8273	1·4339
103	80	·3757	·6066
104	81	·1632	·2309
105	82	·0677	·0677

Difference of Age 84 Years.

x	y	$D_{x,y}$	$N_{x,y}$
84	0	30,625·4	103,722·4
85	1	20,265·5	73,097·0
86	2	14,780·6	52,831·5
87	3	10,939·0	38,050·9
88	4	8,059·11	27,111·89
89	5	5,870·92	19,052·78
90	6	4,217·33	13,181·86
91	7	2,980·12	8,964·53
92	8	2,067·27	5,984·41
93	9	1,406·19	3,917·14
94	10	936·677	2,510·953
95	11	610·175	1,574·276
96	12	388·202	964·101
97	13	240·892	575·899
98	14	145·606	335·007
99	15	85·6154	189·4011
100	16	48·9076	103·7857
101	17	27·1074	54·8781
102	18	14·5588	27·7707
103	19	7·5671	13·2119
104	20	3·8014	5·6448
105	21	1·8434	1·8434

JOINT LIVES:—TWO MALES.

Difference of Age 24 Years.

Difference of Age 83 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 24 Years.**	
24	0	1,156,965	16,812,481
25	1	931,061	15,655,516
26	2	838,074	14,724,455
27	3	777,461	13,886,381
28	4	729,809	13,108,920
29	5	689,184	12,379,111
30	6	653,498	11,689,927
31	7	621,277	11,036,429
32	8	591,512	10,415,152
33	9	563,912	9,823,640
34	10	538,106	9,259,728
35	11	513,788	8,721,622
36	12	490,708	8,207,834
37	13	468,664	7,717,126
38	14	447,494	7,248,462
39	15	427,072	6,800,968
40	16	407,301	6,373,896
41	17	388,112	5,966,595
42	18	369,456	5,578,483
43	19	351,304	5,209,027
44	20	333,642	4,857,723
45	21	316,468	4,524,081
46	22	299,951	4,207,613
47	23	284,073	3,907,662
48	24	268,813	3,623,589
49	25	254,152	3,354,776
50	26	240,071	3,100,624
51	27	226,552	2,860,553
52	28	213,457	2,634,001
53	29	200,877	2,420,544
54	30	188,801	2,219,667
55	31	177,216	2,030,866
56	32	166,105	1,853,650
57	33	155,449	1,687,545
58	34	145,231	1,532,096
59	35	135,430	1,386,865
60	36	126,030	1,251,435
61	37	117,012	1,125,405
62	38	108,363	1,008,393
63	39	100,069	900,030
64	40	92,120·9	799,961·0
65	41	84,510·9	707,840·1
66	42	77,234·2	623,329·2
67	43	70,288·2	546,095·0
68	44	63,673·0	475,806·8
69	45	57,390·6	412,133·8
70	46	51,444·5	354,743·2
71	47	45,839·6	303,298·7
72	48	40,581·1	257,459·1
73	49	35,674·5	216,878·0
74	50	31,124·2	181,203·5
75	51	26,933·3	150,079·3
76	52	23,089·9	123,146·0
77	53	19,606·8	100,056·1
78	54	16,480·0	80,449·3
79	55	13,701·8	63,969·3
80	56	11,260·0	50,267·5
81	57	9,138·95	39,007·45
82	58	7,319·64	29,868·50
83	59	5,780·06	22,548·86
84	60	4,495·91	16,768·80
85	61	3,441·28	12,272·89
86	62	2,589·35	8,831·61
87	63	1,913·21	6,242·26
88	64	1,386·59	4,329·05
89	65	984·550	2,942·455
90	66	684·070	1,957·905
91	67	464·501	1,273·835
92	68	307·840	809·334
93	69	198·850	501·494
94	70	125·018	302·644
95	71	76·3897	177·6256
96	72	45·2958	101·2359
97	73	26·0237	55·9401
98	74	14·4634	29·9164
99	75	7·7633	15·4530
100	76	4·0176	7·6897
101	77	2·0011	3·6721
102	78	·9576	1·6710
103	79	·4394	·7134
104	80	·1930	·2740
105	81	·0810	·0810
		Difference of Age 83 Years.	
83	0	37,609·0	132,485·5
84	1	25,239·4	94,876·5
85	2	18,684·2	69,637·1
86	3	14,046·8	50,952·9
87	4	10,521·4	36,906·1
88	5	7,799·37	26,384·70
89	6	5,706·17	18,585·33
90	7	4,110·49	12,879·16
91	8	2,909·51	8,768·67
92	9	2,021·38	5,859·16
93	10	1,376·60	3,837·78
94	11	917·752	2,461·177
95	12	598·181	1,543·425
96	13	380·683	945·244
97	14	236·240	564·561
98	15	142·773	328·321
99	16	83·9231	185·5481
100	17	47·9188	101·6250
101	18	26·5441	53·7062
102	19	14·2469	27·1621
103	20	7·3997	12·9152
104	21	3·7146	5·5155
105	22	1·8009	1·8009

JOINT LIVES:—TWO MALES.

Difference of Age 25 Years.

Difference of Age 82 Years.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
		Difference of Age 25 Years.	
25	0	1,129,745	16,295,202
26	1	908,999	15,165,457
27	2	818,073	14,256,458
28	3	758,772	13,438,385
29	4	712,135	12,679,613
30	5	672,366	11,967,478
31	6	637,424	11,295,112
32	7	605,867	10,657,688
33	8	576,712	10,051,821
34	9	549,671	9,475,109
35	10	524,382	8,925,438
36	11	500,547	8,401,056
37	12	477,921	7,900,509
38	13	456,306	7,422,588
39	14	435,545	6,966,282
40	15	415,514	6,530,737
41	16	396,121	6,115,223
42	17	377,297	5,719,102
43	18	358,995	5,341,805
44	19	341,188	4,982,810
45	20	323,862	4,641,622
46	21	307,017	4,317,760
47	22	290,817	4,010,743
48	23	275,242	3,719,926
49	24	260,276	3,444,684
50	25	245,898	3,184,408
51	26	232,091	2,938,510
52	27	218,715	2,706,419
53	28	205,862	2,487,704
54	29	193,523	2,281,842
55	30	181,685	2,088,319
56	31	170,329	1,906,634
57	32	159,439	1,736,305
58	33	148,994	1,576,866
59	34	138,975	1,427,872
60	35	129,363	1,288,897
61	36	120,143	1,159,534
62	37	111,297	1,039,391
63	38	102,814	928,094
64	39	94,683·2	825,279·5
65	40	86,896·2	730,596·3
66	41	79,448·1	643,700·1
67	42	72,336·3	564,252·0
68	43	65,560·8	491,915·7
69	44	59,123·5	426,354·9
70	45	53,028·1	367,231·4
71	46	47,279·4	314,203·3
72	47	41,883·1	266,923·9
73	48	36,844·7	225,040·8
74	49	32,168·9	188,196·1
75	50	27,859·3	156,027·2
76	51	23,917·3	128,167·9
77	52	20,330·2	104,250·6
78	53	17,106·2	83,920·4
79	54	14,238·4	66,814·2
80	55	11,715·2	52,575·8
81	56	9,521·04	40,860·63
82	57	7,636·80	31,339·59
83	58	6,040·26	23,702·79
84	59	4,706·76	17,662·53
85	60	3,609·90	12,955·77
86	61	2,722·30	9,345·87
87	62	2,016·46	6,623·57
88	63	1,465·46	4,607·11
89	64	1,043·75	3,141·65
90	65	727·663	2,097·902
91	66	495·953	1,370·239
92	67	330·038	874·286
93	68	214·151	544·248
94	69	135·303	330·097
95	70	83·1192	194·7939
96	71	49·5747	111·6747
97	72	28·6628	62·1000
98	73	16·0395	33·4372
99	74	8·6731	17·3977
100	75	4·5242	8·7246
101	76	2·2727	4·2004
102	77	1·0976	1·9277
103	78	·5086	·8301
104	79	·2257	·3215
105	80	·0958	·0958

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
		Difference of Age 82 Years.	
82	0	45,574·8	167,030·1
83	1	30,994·8	121,455·3
84	2	23,270·1	90,460·5
85	3	17,756·7	67,190·4
86	4	13,510·7	49,433·7
87	5	10,182·3	35,923·0
88	6	7,580·51	25,740·71
89	7	5,561·62	18,160·20
90	8	4,013·10	12,598·58
91	9	2,844·93	8,585·48
92	10	1,978·85	5,740·55
93	11	1,348·79	3,761·70
94	12	899·712	2,412·908
95	13	586·594	1,513·196
96	14	373·331	926·602
97	15	231·645	553·271
98	16	139·951	321·626
99	17	82·2263	181·6753
100	18	46·9229	99·4490
101	19	25·9754	52·5261
102	20	13·9317	26·5507
103	21	7·2307	12·6190
104	22	3·6291	5·3883
105	23	1·7592	1·7592

JOINT LIVES:—Two Males.

Difference of Age 26 Years.

Difference of Age 81 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 26 Years.**		x	y	**Difference of Age 26 Years.**	
26	0	1,102,974	15,786,564	81	55	9,905·97	42,724·25
27	1	887,305	14,683,590	82	56	7,956·08	32,818·28
28	2	798,407	13,796,285	83	57	6,301·98	24,862·20
29	3	740,397	12,997,878	84	58	4,918·65	18,560·22
30	4	694,757	12,257,481	85	59	3,779·20	13,641·57
31	5	655,828	11,562,724	86	60	2,855·69	9,862·37
32	6	621,614	10,906,896	87	61	2,119·99	7,006·68
33	7	590,708	10,285,282	88	62	1,544·54	4,886·69
34	8	562,148	9,694,574	89	63	1,103·12	3,342·15
35	9	535,653	9,132,426	90	64	771·414	2,239·033
36	10	510,869	8,596,773	91	65	527·557	1,467·619
37	11	487,503	8,085,904	92	66	352·385	940·062
38	12	465,319	7,598,401	93	67	229·593	587·677
39	13	444,121	7,133,082	94	68	145·714	358·084
40	14	423,758	6,688,961	95	69	89·9572	212·3704
41	15	404,109	6,265,203	96	70	53·9419	122·4132
42	16	385,083	5,861,094	97	71	31·3704	68·4713
43	17	366,614	5,476,011	98	72	17·6661	37·1009
44	18	348,658	5,109,397	99	73	9·6183	19·4348
45	19	331,188	4,760,739	100	74	5·0544	9·8165
46	20	314,191	4,429,551	101	75	2·5593	4·7621
47	21	297,667	4,115,360	102	76	1·2465	2·2028
48	22	281,776	3,817,693	103	77	·5830	·9563
49	23	266,501	3,535,917	104	78	·2613	·3733
50	24	251,823	3,269,416	105	79	·1120	·1120
51	25	237,724	3,017,593			**Difference of Age 81 Years.**	
52	26	224,063	2,779,869				
53	27	210,933	2,555,806				
54	28	198,326	2,344,873				
55	29	186,229	2,146,547				
56	30	174,625	1,960,318	81	0	54,539·4	207,995·4
57	31	163,494	1,785,693	82	1	37,559·8	153,456·0
58	32	152,817	1,622,199	83	2	28,576·4	115,896·2
59	33	142,575	1,469,382	84	3	22,114·9	87,319·8
60	34	132,749	1,326,807	85	4	17,078·9	65,204·9
61	35	123,321	1,194,058	86	5	13,075·2	48,126·0
62	36	114,275	1,070,737	87	6	9,896·62	35,050·76
63	37	105,599	956,462	88	7	7,388·48	25,154·14
64	38	97,280·8	850,863·3	89	8	5,429·84	17,765·66
65	39	89,313·1	753,582·5	90	9	3,924·03	12,335·82
66	40	81,690·4	664,269·4	91	10	2,785·07	8,411·79
67	41	74,409·8	582,579·0	92	11	1,938·87	5,626·72
68	42	67,471·2	508,169·2	93	12	1,322·27	3,687·85
69	43	60,876·4	440,698·0	94	13	882·285	2,365·584
70	44	54,629·3	379,821·6	95	14	575·266	1,483·299
71	45	48,734·8	325,192·3	96	15	366·069	908·033
72	46	43,198·7	276,457·5	97	16	227·066	541·964
73	47	38,026·7	233,258·8	98	17	137·121	314·898
74	48	33,224·1	195,232·1	99	18	80·5175	177·7768
75	49	28,794·5	162,008·0	100	19	45·9176	97·2593
76	50	24,739·6	133,213·5	101	20	25·4008	51·3417
77	51	21,058·6	108,473·9	102	21	13·6136	25·9409
78	52	17,737·4	87,415·3	103	22	7·0643	12·3273
79	53	14,779·5	69,677·9	104	23	3·5449	5·2630
80	54	12,174·1	54,898·4	105	24	1·7181	1·7181

JOINT LIVES:—Two Males.

Difference of Age 27 Years.

Difference of Age 80 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Difference of Age 27 Years.**	
27	0	1,076,651	15,286,464
28	1	865,975	14,209,813
29	2	779,072	13,343,838
30	3	722,329	12,564,766
31	4	677,668	11,842,437
32	5	639,561	11,164,769
33	6	606,061	10,525,208
34	7	575,791	9,919,147
35	8	547,811	9,343,356
36	9	521,849	8,795,545
37	10	497,556	8,273,696
38	11	474,649	7,776,140
39	12	452,893	7,301,491
40	13	432,102	6,848,598
41	14	412,126	6,416,496
42	15	392,848	6,004,370
43	16	374,180	5,611,522
44	17	356,058	5,237,342
45	18	338,439	4,881,284
46	19	321,298	4,542,845
47	20	304,622	4,221,547
48	21	288,414	3,916,925
49	22	272,827	3,628,511
50	23	257,846	3,355,684
51	24	243,452	3,097,838
52	25	229,501	2,854,386
53	26	216,090	2,624,885
54	27	203,211	2,408,795
55	28	190,851	2,205,584
56	29	178,992	2,014,733
57	30	167,617	1,835,741
58	31	156,704	1,668,124
59	32	146,234	1,511,420
60	33	136,188	1,365,186
61	34	126,548	1,228,998
62	35	117,298	1,102,450
63	36	108,424	985,152
64	37	99,915·4	876,727·6
65	38	91,763·5	776,812·2
66	39	83,962·6	685,048·7
67	40	76,510·0	601,086·1
68	41	69,405·2	524,576·1
69	42	62,650·3	455,170·9
70	43	56,249·0	392,520·6
71	44	50,206·4	336,271·6
72	45	44,528·5	286,065·2
73	46	39,221·2	241,536·7
74	47	34,290·0	202,315·5
75	48	29,739·0	168,025·5
76	49	25,570·1	138,286·5
77	50	21,782·7	112,716·4
78	51	18,373·0	90,933·7
79	52	15,324·7	72,560·7
80	53	12,636·7	57,236·0
81	54	10,294·0	44,599·3
82	55	8,277·75	34,305·34
83	56	6,565·46	26,027·59
84	57	5,131·77	19,462·13
85	58	3,949·33	14,330·36
86	59	2,989·62	10,381·03
87	60	2,223·87	7,391·41
88	61	1,623·85	5,167·54
89	62	1,162·64	3,543·69
90	63	815·293	2,381·051
91	64	559·277	1,565·758
92	65	374·841	1,006·481
93	66	245·138	631·640
94	67	156·221	386·502
95	68	96·8793	230·2810
96	69	58·3796	133·4017
97	70	34·1339	75·0221
98	71	19·3350	40·8882
99	72	10·5937	21·5532
100	73	5·6052	10·9595
101	74	2·8593	5·3543
102	75	1·4037	2·4950
103	76	·6621	1·0913
104	77	·2995	·4292
105	78	·1297	·1297

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Difference of Age 80 Years.**	
80	0	64,500·5	255,998·0
81	1	44,947·8	191,497·5
82	2	34,629·2	146,549·7
83	3	27,157·8	111,920·5
84	4	21,270·8	84,762·7
85	5	16,528·5	63,491·9
86	6	12,708·3	46,963·4
87	7	9,645·91	34,255·10
88	8	7,213·41	24,609·19
89	9	5,309·33	17,395·78
90	10	3,841·47	12,086·45
91	11	2,728·80	8,244·98
92	12	1,900·76	5,516·18
93	13	1,296·66	3,615·42
94	14	865·247	2,318·758
95	15	564·075	1,453·511
96	16	358·833	889·436
97	17	222·475	530·603
98	18	134·272	308·128
99	19	78·7924	173·8559
100	20	44·9020	95·0635
101	21	24·8209	50·1615
102	22	13·3003	25·3406
103	23	6·9005	12·0403
104	24	3·4621	5·1398
105	25	1·6777	1·6777

JOINT LIVES:—Two Males.

Difference of Age 28 Years.

Difference of Age 79 Years.

Difference of Age 28 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
28	0	1,050,770	14,794,805
29	1	845,004	13,744,035
30	2	760,061	12,899,031
31	3	704,561	12,138,970
32	4	660,860	11,434,409
33	5	623,559	10,773,549
34	6	590,756	10,149,990
35	7	561,106	9,559,234
36	8	533,694	8,998,128
37	9	508,250	8,464,434
38	10	484,436	7,956,184
39	11	461,974	7,471,748
40	12	440,637	7,009,774
41	13	420,241	6,569,137
42	14	400,642	6,148,896
43	15	381,725	5,748,254
44	16	363,405	5,366,529
45	17	345,621	5,003,124
46	18	328,332	4,657,503
47	19	311,513	4,329,171
48	20	295,153	4,017,658
49	21	279,254	3,722,505
50	22	263,967	3,443,251
51	23	249,275	3,179,284
52	24	235,031	2,930,009
53	25	221,335	2,694,978
54	26	208,180	2,473,643
55	27	195,552	2,265,463
56	28	183,435	2,069,911
57	29	171,809	1,886,476
58	30	160,656	1,714,667
59	31	149,953	1,554,011
60	32	139,683	1,404,058
61	33	129,827	1,264,375
62	34	120,368	1,134,548
63	35	111,292	1,014,180
64	36	102,589	902,888
65	37	94,248·7	800,298·5
66	38	86,266·1	706,049·8
67	39	78,638·0	619,783·7
68	40	71,364·1	541,145·7
69	41	64,446·1	469,781·6
70	42	57,888·0	405,335·5
71	43	51,694·9	347,447·5
72	44	45,873·0	295,752·6
73	45	40,428·5	249,879·6
74	46	35,367·1	209,451·1
75	47	30,693·1	174,084·0
76	48	26,408·8	143,390·9
77	49	22,513·9	116,982·1
78	50	19,004·7	94,468·2
79	51	15,873·9	75,463·5
80	52	13,102·9	59,589·6
81	53	10,685·1	46,486·7
82	54	8,601·97	35,801·57
83	55	6,830·90	27,199·60
84	56	5,346·33	20,368·70
85	57	4,120·45	15,022·37
86	58	3,124·21	10,901·92
87	59	2,328·17	7,777·71
88	60	1,703·42	5,449·54
89	61	1,222·34	3,746·12
90	62	859·289	2,523·775
91	63	591·090	1,664·486
92	64	397·378	1,073·396
93	65	260·760	676·018
94	66	166·799	415·258
95	67	103·865	248·459
96	68	62·8718	144·5936
97	69	36·9421	81·7218
98	70	21·0383	44·7797
99	71	11·5944	23·7414
100	72	6·1737	12·1470
101	73	3·1708	5·9733
102	74	1·5682	2·8025
103	75	·7456	1·2343
104	76	·3401	·4887
105	77	·1486	·1486

Difference of Age 79 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
79	0	75,437·9	311,618·2
80	1	53,157·0	236,180·3
81	2	41,440·7	183,023·3
82	3	32,910·1	141,582·6
83	4	26,121·2	108,672·5
84	5	20,585·2	82,551·3
85	6	16,064·7	61,966·1
86	7	12,386·4	45,901·4
87	8	9,417·36	33,514·95
88	9	7,053·31	24,097·59
89	10	5,197·62	17,044·28
90	11	3,763·85	11,846·66
91	12	2,675·16	8,082·81
92	13	1,863·94	5,407·65
93	14	1,271·62	3,543·71
94	15	848·415	2,272·092
95	16	552·926	1,423·677
96	17	351·578	870·751
97	18	217·852	519·173
98	19	131·395	301·321
99	20	77·0496	169·9259
100	21	43·8768	92·8763
101	22	24·2497	48·9995
102	23	12·9919	24·7498
103	24	6·7393	11·7579
104	25	3·3807	5·0186
105	26	1·6379	1·6379

JOINT LIVES:—TWO MALES.

Difference of Age 29 Years.

Difference of Age 78 Years.

Difference of Age 29 Years.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
29	0	1,025,323	14,311,478
30	1	824,383	13,286,155
31	2	741,365	12,461,772
32	3	687,086	11,720,407
33	4	644,325	11,033,321
34	5	607,812	10,388,996
35	6	575,690	9,781,184
36	7	546,646	9,205,494
37	8	519,786	8,658,848
38	9	494,848	8,139,062
39	10	471,501	7,644,214
40	11	449,473	7,172,713
41	12	428,542	6,723,240
42	13	408,531	6,294,698
43	14	389,298	5,886,167
44	15	370,733	5,496,869
45	16	352,754	5,126,136
46	17	335,300	4,773,382
47	18	318,333	4,438,082
48	19	301,829	4,119,749
49	20	285,779	3,817,920
50	21	270,185	3,532,141
51	22	255,193	3,261,956
52	23	240,652	3,006,763
53	24	226,668	2,766,111
54	25	213,232	2,539,443
55	26	200,333	2,326,211
56	27	187,953	2,125,878
57	28	176,073	1,937,925
58	29	164,674	1,761,852
59	30	153,735	1,597,178
60	31	143,236	1,443,443
61	32	133,158	1,300,207
62	33	123,486	1,167,049
63	34	114,205	1,043,563
64	35	105,302	929,358
65	36	96,770·4	824,056·3
66	37	88,602·4	727,285·9
67	38	80,795·5	638,683·5
68	39	73,349·1	557,888·0
69	40	66,265·0	484,538·9
70	41	59,547·3	418,273·9
71	42	53,201·2	358,726·6
72	43	47,233·1	305,525·4
73	44	41,649·3	258,292·3
74	45	36,455·8	216,643·0
75	46	31,657·2	180,187·2
76	47	27,256·1	148,530·0
77	48	23,252·3	121,273·9
78	49	19,642·6	98,021·6
79	50	16,419·6	78,379·0
80	51	13,572·4	61,959·4
81	52	11,079·3	48,387·0
82	53	8,928·83	37,307·69
83	54	7,098·46	28,378·86
84	55	5,562·48	21,280·40
85	56	4,292·72	15,717·92
86	57	3,259·58	11,425·20
87	58	2,432·98	8,165·62
88	59	1,783·31	5,732·64
89	60	1,282·24	3,949·33
90	61	903·410	2,667·091
91	62	622·987	1,763·681
92	63	419·982	1,140·694
93	64	276·438	720·712
94	65	177·428	444·274
95	66	110·898	266·846
96	67	67·4053	155·9480
97	68	39·7847	88·5427
98	69	22·7690	48·7580
99	70	12·6158	25·9890
100	71	6·7569	13·3732
101	72	3·4924	6·6163
102	73	1·7391	3·1239
103	74	·8330	1·3848
104	75	·3830	·5518
105	76	·1688	·1688

Difference of Age 78 Years.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
78	0	87,314·3	375,388·8
79	1	62,170·9	288,074·5
80	2	49,009·4	225,903·6
81	3	39,383·5	176,894·2
82	4	31,653·9	137,510·7
83	5	25,279·3	105,856·8
84	6	20,007·6	80,577·5
85	7	15,657·7	60,569·9
86	8	12,092·9	44,912·2
87	9	9,208·35	32,819·28
88	10	6,904·91	23,610·93
89	11	5,092·61	16,706·02
90	12	3,689·87	11,613·41
91	13	2,623·35	7,923·54
92	14	1,827·95	5,300·19
93	15	1,246·89	3,472·24
94	16	831·645	2,225·349
95	17	541·747	1,393·704
96	18	344·271	851·957
97	19	213·184	507·686
98	20	128·489	294·502
99	21	75·2904	166·0133
100	22	42·8670	90·7229
101	23	23·6873	47·8559
102	24	12·6884	24·1686
103	25	6·5808	11·4802
104	26	3·3006	4·8994
105	27	1·5988	1·5988

ENGLISH LIFE TABLE, No. 3.

JOINT LIVES:—Two Males.

Difference of Age 30 Years.

Difference of Age 77 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 30 Years.**	
30	0	1,000,302	13,836,387
31	1	804,106	12,836,085
32	2	722,977	12,031,979
33	3	669,895	11,309,002
34	4	628,053	10,639,107
35	5	592,311	10,011,054
36	6	560,854	9,418,743
37	7	532,401	8,857,889
38	8	506,080	8,325,488
39	9	481,635	7,819,408
40	10	458,741	7,337,773
41	11	437,135	6,879,032
42	12	416,600	6,441,897
43	13	396,964	6,025,297
44	14	378,088	5,628,333
45	15	359,867	5,250,245
46	16	342,219	4,890,378
47	17	325,089	4,548,159
48	18	308,437	4,223,070
49	19	292,243	3,914,633
50	20	276,498	3,622,390
51	21	261,204	3,345,892
52	22	246,365	3,084,688
53	23	232,089	2,838,323
54	24	218,370	2,606,234
55	25	205,195	2,387,864
56	26	192,548	2,182,669
57	27	180,410	1,990,121
58	28	168,761	1,809,711
59	29	157,580	1,640,950
60	30	146,848	1,483,370
61	31	136,545	1,336,522
62	32	126,655	1,199,977
63	33	117,164	1,073,322
64	34	108,058	956,158
65	35	99,330·2	848,100·2
66	36	90,973·1	748,770·0
67	37	82,983·6	657,796·9
68	38	75,361·4	574,813·3
69	39	68,108·2	499,451·9
70	40	61,228·0	431,343·7
71	41	54,726·2	370,115·7
72	42	48,609·4	315,389·5
73	43	42,884·1	266,780·1
74	44	37,556·6	223,896·0
75	45	32,631·6	186,339·4
76	46	28,112·2	153,707·8
77	47	23,998·3	125,595·6
78	48	20,286·9	101,597·3
79	49	16,970·8	81,310·4
80	50	14,039·0	64,339·6
81	51	11,476·4	50,300·6
82	52	9,258·25	38,824·24
83	53	7,368·19	29,565·99
84	54	5,780·35	22,197·80
85	55	4,466·28	16,417·45
86	56	3,395·86	11,951·17
87	57	2,538·40	8,555·31
88	58	1,863·59	6,016·91
89	59	1,342·37	4,153·32
90	60	947·677	2,810·950
91	61	654·975	1,863·273
92	62	442·645	1,208·298
93	63	292·163	765·653
94	64	188·096	473·490
95	65	117·965	285·394
96	66	71·9693	167·4292
97	67	42·6535	95·4599
98	68	24·5211	52·8064
99	69	13·6537	28·2853
100	70	7·3521	14·6316
101	71	3·8223	7·2795
102	72	1·9155	3·4572
103	73	·9237	1·5417
104	74	·4279	·6180
105	75	·1901	·1901
		Difference of Age 77 Years.	
77	0	100,078	447,786
78	1	71,958·7	347,707·6
79	2	57,320·0	275,748·9
80	3	46,576·5	218,428·9
81	4	37,880·2	171,852·4
82	5	30,633·7	133,972·2
83	6	24,570·0	103,338·5
84	7	19,500·7	78,768·5
85	8	15,286·7	59,267·8
86	9	11,824·5	43,981·1
87	10	9,014·60	32,156·62
88	11	6,765·40	23,142·02
89	12	4,992·50	16,376·62
90	13	3,618·40	11,384·12
91	14	2,572·69	7,765·72
92	15	1,792·39	5,193·03
93	16	1,222·24	3,400·64
94	17	814·830	2,178·398
95	18	530·488	1,363·568
96	19	336·895	833·080
97	20	208·469	496·185
98	21	125·555	287·716
99	22	73·5576	162·1614
100	23	41·8729	88·6038
101	24	23·1340	46·7309
102	25	12·3899	23·5969
103	26	6·4248	11·2070
104	27	3·2218	4·7822
105	28	1·5604	1·5604

JOINT LIVES:—Two Males.

Difference of Age 31 Years.

Difference of Age 76 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 31 Years.**	
31	0	975,698	13,369,438
32	1	784,162	12,393,740
33	2	704,888	11,609,578
34	3	652,978	10,904,690
35	4	612,036	10,251,712
36	5	577,047	9,639,676
37	6	546,239	9,062,629
38	7	518,362	8,516,390
39	8	492,567	7,998,028
40	9	468,601	7,505,461
41	10	446,149	7,036,860
42	11	424,954	6,590,711
43	12	404,805	6,165,757
44	13	385,534	5,760,952
45	14	367,006	5,375,418
46	15	349,120	5,008,412
47	16	331,797	4,659,292
48	17	314,983	4,327,495
49	18	298,642	4,012,512
50	19	282,752	3,713,870
51	20	267,308.	3,431,118
52	21	252,168	3,163,810
53	22	237,599	2,911,642
54	23	223,593	2,674,043
55	24	210,139	2,450,450
56	25	197,222	2,240,311
57	26	184,821	2,043,089
58	27	172,918	1,858,268
59	28	161,491	1,685,350
60	29	150,521	1,523,859
61	30	139,988	1,373,338
62	31	129,877	1,233,350
63	32	120,170	1,103,473
64	33	110,858	983,303
65	34	101,930	872,445
66	35	93,379·5	770,515·3
67	36	85,203·9	677,135·8
68	37	77,402·4	591,931·9
69	38	69,976·7	514,529·5
70	39	62,931·0	444,552·8
71	40	56,270·8	381,621·8
72	41	50,002·8	325,351·0
73	42	44,133·7	275,348·2
74	43	38,670·1	231,214·5
75	44	33,617·0	192,544·4
76	45	28,977·5	158,927·4
77	46	24,752·1	129,949·9
78	47	20,937·7	105,197·8
79	48	17,527·5	84,260·1
80	49	14,510·3	66,732·6
81	50	11,870·9	52,222·3
82	51	9,590·00	40,351·38
83	52	7,640·03	30,761·38
84	53	5,999·99	23,121·35
85	54	4,641·21	17,121·36
86	55	3,533·15	12,480·15
87	56	2,644·52	8,947·00
88	57	1,944·33	6,302·48
89	58	1,402·80	4,358·15
90	59	992·122	2,955·352
91	60	687·068	1,963·230
92	61	465·373	1,276·162
93	62	307·929	810 789
94	63	198·796	502·860
95	64	125·057	304·064
96	65	76·5556	179·0071
97	66	45·5415	102·4515
98	67	26·2892	56·9100
99	68	14·7043	30·6208
100	69	7·9569	15·9165
101	70	4·1590	7·9596
102	71	2·0964	3·8006
103	72	1·0174	1·7042
104	73	·4745	·6868
105	74	·2123	·2123

Difference of Age 76 Years.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
76	0	113,663	529,218
77	1	82,477·3	415,554·8
78	2	66,344·1	333,077·5
79	3	54,474·5	266,733·4
80	4	44,798·6	212,258·9
81	5	36,659·4	167,460·3
82	6	29,774·1	130,800·9
83	7	23,947·5	101,026·8
84	8	19,038·7	77,079·3
85	9	14,947·4	58,040·6
86	10	11,575·7	43,093·2
87	11	8,832·47	31,517·54
88	12	6,632·41	22,685·07
89	13	4,895·80	16,052·66
90	14	3,548·52	11,156·86
91	15	2,522·64	7,608·34
92	16	1,756·96	5,085·70
93	17	1,197·53	3,328·74
94	18	797·897	2,131·208
95	19	519·122	1,333·311
96	20	329·444	814·189
97	21	203·709	484·745
98	22	122·665	281·036
99	23	71·8519	158·3711
100	24	40·8948	86·5192
101	25	22·5897	45·6244
102	26	12·0963	23·0347
103	27	6·2715	10·9384
104	28	3·1443	4·6669
105	29	1·5226	1·5226

JOINT LIVES:—TWO MALES.

Difference of Age 32 Years.

Difference of Age 75 Years.

Difference of Age 32 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
32	0	951,498	12,910,523
33	1	764,541	11,959,025
34	2	687,087	11,194,484
35	3	636,325	10,507,397
36	4	596,264	9,871,072
37	5	562,010	9,274,808
38	6	531,835	8,712,798
39	7	504,521	8,180,963
40	8	479,237	7,676,442
41	9	455,738	7,197,205
42	10	433,717	6,741,467
43	11	412,922	6,307,750
44	12	393,149	5,894,828
45	13	374,233	5,501,679
46	14	356,046	5,127,446
47	15	338,488	4,771,400
48	16	321,483	4,432,912
49	17	304,980	4,111,429
50	18	288,943	3,806,449
51	19	273,354	3,517,506
52	20	258,061	3,244,152
53	21	243,196	2,986,091
54	22	228,901	2,742,895
55	23	215,165	2,513,994
56	24	201,973	2,298,829
57	25	189,307	2,096,856
58	26	177,145	1,907,549
59	27	165,469	1,730,404
60	28	154,257	1,564,935
61	29	143,490	1,410,678
62	30	133,152	1,267,188
63	31	123,227	1,134,036
64	32	113,703	1,010,809
65	33	104,570	897,106
66	34	95,823·3	792,535·7
67	35	87,457·8	696,712·4
68	36	79,473·4	609,254·6
69	37	71,871·9	529,781·2
70	38	64,657·5	457,909·3
71	39	57,836·0	393,251·8
72	40	51,414·0	335,415·8
73	41	45,398·8	284,001·8
74	42	39,796·9	238,603·0
75	43	34,613·7	198,806·1
76	44	29,852·5	164,192·4
77	45	25,514·1	134,339·9
78	46	21,595·4	108,825·8
79	47	18,089·8	87,230·4
80	48	14,986·2	69,140·6
81	49	12,269·4	54,154·4
82	50	9,919·73	41,885·00
83	51	7,913·80	31,965·27
84	52	6,221·36	24,051·47
85	53	4,817·57	17,830·11
86	54	3,671·54	13,012·54
87	55	2,751·44	9,341·00
88	56	2,025·63	6,589·56
89	57	1,463·58	4,563·93
90	58	1,036·79	3,100·35
91	59	719·291	2,063·560
92	60	488·176	1,344·269
93	61	323·740	856·093
94	62	209·523	532·353
95	63	132·171	322·830
96	64	81·1586	190·6594
97	65	48·4437	109·5008
98	66	28·0693	61·0571
99	67	15·7646	32·9878
100	68	8·5692	17·2232
101	69	4·5012	8·6540
102	70	2·2811	4·1528
103	71	1·1135	1·8717
104	72	·5227	7582
105	73	·2355	·2355

Difference of Age 75 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
75	0	127,996	620,028
76	1	93,673·4	492,031·6
77	2	76,042·0	398,358·2
78	3	63,050·6	322,316·2
79	4	52,395·2	259,265·6
80	5	43,354·8	206,870·4
81	6	35,630·6	163,515·6
82	7	29,019·8	127,885·0
83	8	23,380·1	98,865·2
84	9	18,616·1	75,485·1
85	10	14,632·9	56,869·0
86	11	11,341·8	42,236·1
87	12	8,658·85	30,894·26
88	13	6,503·95	22,235·41
89	14	4,801·26	15,731·46
90	15	3,479·49	10,930·20
91	16	2,472·78	7,450·71
92	17	1,721·44	4,977·93
93	18	1,172·64	3,256·49
94	19	780·802	2,083·848
95	20	507·640	1,303·046
96	21	321·921	795·406
97	22	199·021	473·485
98	23	119·821	274·464
99	24	70·1735	154·6425
100	25	39·9327	84·4690
101	26	22·0544	44·5363
102	27	11·8076	22·4819
103	28	6·1207	10·6743
104	29	3·0682	4·5536
105	30	1·4854	1·4854

JOINT LIVES:—TWO MALES.

Difference of Age 33 Years.

Difference of Age 74 Years.

Difference of Age 33 Years.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
33	0	927,690	12,459,548
34	1	745,234	11,531,858
35	2	669,564	10,786,624
36	3	619,926	10,117,060
37	4	580,726	9,497,134
38	5	547,190	8,916,408
39	6	517,634	8,369,218
40	7	490,868	7,851,584
41	8	466,082	7,360,716
42	9	443,038	6,894,634
43	10	421,436	6,451,596
44	11	401,032	6,030,160
45	12	381,625	5,629,128
46	13	363,058	5,247,503
47	14	345,203	4,884,445
48	15	327,966	4,539,242
49	16	311,273	4,211,276
50	17	295,075	3,900,003
51	18	279,339	3,604,928
52	19	263,898	3,325,589
53	20	248,878	3,061,691
54	21	234,293	2,812,813
55	22	220,273	2,578,520
56	23	206,804	2,358,247
57	24	193,868	2,151,443
58	25	181,445	1,957,575
59	26	169,514	1,776,130
60	27	158,056	1,606,616
61	28	147,051	1,448,560
62	29	136,482	1,301,509
63	30	126,334	1,165,027
64	31	116,595	1,038,693
65	32	107,254	922,098
66	33	98,305·9	814,844·3
67	34	89,746·6	716,538·4
68	35	81,575·6	626,791·8
69	36	73,794·9	545,216·2
70	37	66,408·6	471,421·3
71	38	59,422·7	405,012·7
72	39	52,844·1	345,590·0
73	40	46,680·1	292,745·9
74	41	40,937·6	246,065·8
75	42	35,622·3	205,128·2
76	43	30,737·6	169,505·9
77	44	26,284·5	138,768·3
78	45	22,260·2	112,483·8
79	46	18,658·0	90,223·6
80	47	15,467·0	71,565·6
81	48	12,671·8	56,098·6
82	49	10,252·7	43,426·8
83	50	8,185·89	33,174·05
84	51	6,444·29	24,988·16
85	52	4,995·31	18,543·87
86	53	3,811·05	13,548·56
87	54	2,859·21	9,737·51
88	55	2,107·52	6,878·30
89	56	1,524·77	4,770·78
90	57	1,081·71	3,246·01
91	58	751·672	2,164·298
92	59	511·071	1,412·626
93	60	339·603	901·555
94	61	220·281	561·952
95	62	139·303	341·671
96	63	85·7750	202·3679
97	64	51·3564	116·5929
98	65	29·8580	65·2365
99	66	16·8320	35·3785
100	67	9·1871	18·5465
101	68	4·8476	9·3594
102	69	2·4688	4·5118
103	70	1·2116	2·0430
104	71	·5720	·8314
105	72	·2594	·2594

Difference of Age 74 Years.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
74	0	142,996	720,485
75	1	105,486	577,489
76	2	86,364·6	472,002·9
77	3	72,267·1	385,638·3
78	4	60,643·9	313,371·2
79	5	50,706·5	252,727·3
80	6	42,138·2	202,020·8
81	7	34,728·0	159,882·6
82	8	28,332·2	125,154·6
83	9	22,861·2	96,822·4
84	10	18,224·5	73,961·2
85	11	14,337·3	55,736·7
86	12	11,118·9	41,399·4
87	13	8,491·13	30,280·50
88	14	6,378·35	21,789·37
89	15	4,707·85	15,411·02
90	16	3,410·71	10,703·17
91	17	2,422·78	7,292·46
92	18	1,685·66	4,869·68
93	19	1,147·52	3,184·02
94	20	763·532	2,036·498
95	21	496·049	1,272·966
96	22	314·513	776·917
97	23	194·406	462·404
98	24	117·022	267·998
99	25	68·5225	150·9755
100	26	38·9864	82·4530
101	27	21·5281	43·4666
102	28	11·5238	21·9385
103	29	5·9725	10·4147
104	30	2·9933	4·4422
105	31	1·4489	1·4489

JOINT LIVES:—Two Males.

Difference of Age 34 Years.

Difference of Age 73 Years.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Difference of Age 34 Years.**	
34	0	904,263	12,016,440
35	1	726,228	11,112,177
36	2	652,309	10,385,949
37	3	603,772	9,733,640
38	4	565,413	9,129,868
39	5	532,579	8,564,455
40	6	503,626	8,031,876
41	7	477,394	7,528,250
42	8	453,094	7,050,856
43	9	430,494	6,597,762
44	10	409,301	6,167,268
45	11	389,277	5,757,967
46	12	370,229	5,368,690
47	13	352,001	4,998,461
48	14	334,472	4,646,460
49	15	317,550	4,311,988
50	16	301,164	3,994,438
51	17	285,267	3,693,274
52	18	269,675	3,408,007
53	19	254,508	3,138,332
54	20	239,768	2,883,824
55	21	225,462	2,644,056
56	22	211,714	2,418,594
57	23	198,505	2,206,880
58	24	185,817	2,008,375
59	25	173,629	1,822,558
60	26	161,920	1,648,929
61	27	150,673	1,487,009
62	28	139,869	1,336,336
63	29	129,494	1,196,467
64	30	119,535	1,066,973
65	31	109,982	947,438
66	32	100,829	837,456
67	33	92,071·7	736,626·7
68	34	83,710·5	644,555·0
69	35	75,747·0	560,844·5
70	36	68,185·4	485,097·5
71	37	61,032·0	416,912·1
72	38	54,293·9	355,880·1
73	39	47,978·5	301,586·2
74	40	42,093·0	253,607·7
75	41	36,643·4	211,514·7
76	42	31,633·3	174,871·3
77	43	27,063·8	143,238·0
78	44	22,932·3	116,174·2
79	45	19,232·3	93,241·9
80	46	15,952·9	74,009·6
81	47	13,078·4	58,056·7
82	48	10,589·0	44,978·3
83	49	8,460·66	34,389·27
84	50	6,665·86	25,928·61
85	51	5,174·31	19,262·75
86	52	3,951·66	14,088·44
87	53	2,967·86	10,136·78
88	54	2,190·07	7,168·92
89	55	1,586·42	4,978·85
90	56	1,126·93	3,392·43
91	57	784·241	2,265·502
92	58	534·078	1,481·261
93	59	355·530	947·183
94	60	231·075	591·653
95	61	146·456	360·578
96	62	90·4037	214·1219
97	63	54·2776	123·7182
98	64	31·6532	69·4406
99	65	17·9047	37·7874
100	66	9·8092	19·8827
101	67	5·1971	10·0735
102	68	2·6588	4·8764
103	69	1·3113	2·2176
104	70	·6224	·9063
105	71	·2839	·2839

Difference of Age 73 Years.

x	y	$D_{x,y}$	$N_{x,y}$
73	0	158,579	830,787
74	1	117,848	672,208
75	2	97,255·2	554,360·4
76	3	82,077·2	457,105·2
77	4	69,508·6	375,028·0
78	5	58,689·4	305,519·4
79	6	49,283·6	246,830·0
80	7	41,070·8	197,546·4
81	8	33,905·2	156,475·6
82	9	27,703·4	122,570·4
83	10	22,380·2	94,867·0
84	11	17,856·2	72,486·8
85	12	14,055·5	54,630·6
86	13	10,903·5	40,575·1
87	14	8,327·15	29,671·55
88	15	6,254·27	21,344·40
89	16	4,614·80	15,090·13
90	17	3,341·75	10,475·33
91	18	2,372·43	7,133·58
92	19	1,649·55	4,761·15
93	20	1,122·14	3,111·60
94	21	746·098	1,989·455
95	22	484·633	1,243·357
96	23	307·220	758·724
97	24	189·865	451·504
98	25	114·269	261·639
99	26	66·8988	147·3696
100	27	38·0560	80·4708
101	28	21·0106	42·4148
102	29	11·2447	21·4042
103	30	5·8268	10·1595
104	31	2·9197	4·3327
105	32	1·4130	1·4130

JOINT LIVES:—Two Males.

Difference of Age 35 Years.

Difference of Age 72 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 35 Years.**	
35	0	881,201	11,581,108
36	1	707,513	10,699,907
37	2	635,311	9,992,394
38	3	587,851	9,357,083
39	4	550,315	8,769,232
40	5	518,166	8,218,917
41	6	489,802	7,700,751
42	7	464,091	7,210,949
43	8	440,266	6,746,858
44	9	418,098	6,306,592
45	10	397,304	5,888,494
46	11	377,652	5,491,190
47	12	358,954	5,113,538
48	13	341,059	4,754,584
49	14	323,850	4,413,525
50	15	307,237	4,089,675
51	16	291,154	3,782,438
52	17	275,399	3,491,284
53	18	260,080	3,215,885
54	19	245,191	2,955,805
55	20	230,730	2,710,614
56	21	216,701	2,479,884
57	22	203,217	2,263,183
58	23	190,261	2,059,966
59	24	177,812	1,869,705
60	25	165,850	1,691,893
61	26	154,357	1,526,043
62	27	143,315	1,371,686
63	28	132,708	1,228,371
64	29	122,525	1,095,663
65	30	112,755	973,138
66	31	103,393	860,383
67	32	94,434·6	756,989·5
68	33	85,879·3	662,554·9
69	34	77,729·3	576,675·6
70	35	69,989·1	498,946·3
71	36	62,665·0	428,957·2
72	37	55,764·3	366,292·2
73	38	49,294·8	310,527·9
74	39	43,263·8	261,233·1
75	40	37,677·6	217,969·3
76	41	32,540·0	180,291·7
77	42	27,852·4	147,751·7
78	43	23,612·2	119,899·3
79	44	19,813·1	96,287·1
80	45	16,443·9	76,474·0
81	46	13,489·2	60,030·1
82	47	10,928·7	46,540·9
83	48	8,738·18	35,612·20
84	49	6,889·61	26,874·02
85	50	5,352·21	19,984·41
86	51	4,093·26	14,632·20
87	52	3,077·35	10,538·94
88	53	2,273·29	7,461·59
89	54	1,648·56	5,188·30
90	55	1,172·50	3,539·74
91	56	817·029	2,367·244
92	57	557·220	1,550·215
93	58	371·535	992·995
94	59	241·912	621·460
95	60	153·632	379·548
96	61	95·0455	225·9155
97	62	57·2066	130·8700
98	63	33·4537	73·6634
99	64	18·9812	40·2097
100	65	10·4343	21·2285
101	66	5·5490	10·7942
102	67	2·8505	5·2452
103	68	1·4122	2·3947
104	69	·6736	·9825
105	70	·3089	·3089

Difference of Age 72 Years.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
72	0	174,660	951,065
73	1	130,690	776,405
74	2	108,653	645,715
75	3	92,427·2	537,061·6
76	4	78,944·3	444,634·4
77	5	67,268·4	365,690·1
78	6	57,042·5	298,421·7
79	7	48,035·1	241,379·2
80	8	40,097·6	193,344·1
81	9	33,152·7	153,246·5
82	10	27,120·5	120,093·8
83	11	21,928·0	92,973·3
84	12	17,505·2	71,045·3
85	13	13,783·2	53,540·1
86	14	10,693·0	39,756·9
87	15	8,165·16	29,063·92
88	16	6,130·64	20,898·76
89	17	4,521·49	14,768·12
90	18	3,272·31	10,246·63
91	19	2,321·60	6,974·32
92	20	1,613·06	4,652·72
93	21	1,096·51	3,039·66
94	22	728·928	1,943·148
95	23	473·395	1,214·220
96	24	300·043	740·825
97	25	185·397	440·782
98	26	111·561	255·385
99	27	65·3022	143·8238
100	28	37·1412	78·5216
101	29	20·5018	41·3804
102	30	10·9703	20·8786
103	31	5·6834	9·9083
104	32	2·8473	4·2249
105	33	1·3776	1·3776

JOINT LIVES:—Two Males.

Difference of Age 36 Years.

Difference of Age 71 Years.

Difference of Age 36 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
36	0	858,492	11,153,477
37	1	689,076	10,294,985
38	2	618,558	9,605,909
39	3	572,154	8,987,351
40	4	535,422	8,415,197
41	5	503,943	7,879,775
42	6	476,153	7,375,832
43	7	450,951	6,899,679
44	8	427,588	6,448,728
45	9	405,844	6,021,140
46	10	385,440	5,615,296
47	11	366,151	5,229,856
48	12	347,795	4,863,705
49	13	330,227	4,515,910
50	14	313,332	4,185,683
51	15	297,025	3,872,351
52	16	281,082	3,575,326
53	17	265,599	3,294,244
54	18	250,559	3,028,645
55	19	235,949	2,778,086
56	20	221,764	2,542,137
57	21	208,004	2,320,373
58	22	194,778	2,112,369
59	23	182,065	1,917,591
60	24	169,846	1,735,526
61	25	158,103	1,565,680
62	26	146,818	1,407,577
63	27	135,977	1,260,759
64	28	125,566	1,124,782
65	29	115,576	999,216
66	30	106,000	883,640
67	31	96,836·4	777,639·5
68	32	88,083·2	680,803·1
69	33	79,743·1	592,719·9
70	34	71,820·8	512,976·8
71	35	64,322·6	441,156·0
72	36	57,256·3	376,833·4
73	37	50,629·8	319,577·1
74	38	44,450·8	268,947·3
75	39	38,725·6	224,496·5
76	40	33,458·4	185,770·9
77	41	28,650·8	152,312·5
78	42	24,300·3	123,661·7
79	43	20,400·5	99,361·4
80	44	16,940·5	78,960·9
81	45	13,904·4	62,020·4
82	46	11,272·0	48,116·0
83	47	9,018·52	36,843·97
84	48	7,115·59	27,825·45
85	49	5,531·87	20,709·86
86	50	4,233·99	15,177·99
87	51	3,187·62	10,944·00
88	52	2,357·16	7,756·38
89	53	1,711·20	5,399·22
90	54	1,218·42	3,688·02
91	55	850·062	2,469·600
92	56	580·517	1,619·538
93	57	387·633	1,039·021
94	58	252·803	651·388
95	59	160·837	398·585
96	60	99·7027	237·7480
97	61	60·1439	138·0453
98	62	35·2590	77·9014
99	63	20·0609	42·6424
100	64	11·0616	22·5815
101	65	5·9026	11·5199
102	66	3·0435	5·6173
103	67	1·5140	2·5738
104	68	·7255	1·0598
105	69	·3343	·3343

Difference of Age 71 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
71	0	191,160	1,081,387
72	1	143,944	890,227
73	2	120,493	746,283
74	3	103,259	625,790
75	4	88,899·2	522,530·6
76	5	76,400·0	433,631·4
77	6	65,380·8	357,231·4
78	7	55,597·5	291,850·6
79	8	46,897·0	236,253·1
80	9	39,207·7	189,356·1
81	10	32,455·1	150,148·4
82	11	26,572·6	117,693·3
83	12	21,497·0	91,120·7
84	13	17,166·2	69,623·7
85	14	13,517·0	52,457·5
86	15	10,485·0	38,940·5
87	16	8,003·77	28,455·54
88	17	6,006·69	20,451·77
89	18	4,427·53	14,445·08
90	19	3,202·20	10,017·55
91	20	2,270·25	6,815·35
92	21	1,576·23	4,545·10
93	22	1,071·28	2,968·87
94	23	712·025	1,897·586
95	24	462·337	1,185·561
96	25	292·984	723·224
97	26	181·004	430·240
98	27	108·899	249·236
99	28	63·7324	140·3374
100	29	36·2417	76·6050
101	30	20·0015	40·3633
102	31	10·7005	20·3618
103	32	5·5425	9·6613
104	33	2·7760	4·1188
105	34	1·3428	1·3428

JOINT LIVES:—TWO MALES.

Difference of Age 37 Years.

Difference of Age 70 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
		Difference of Age 37 Years.	
37	0	836,121	10,733,487
38	1	670,906	9,897,366
39	2	602,041	9,226,460
40	3	556,671	8,624,419
41	4	520,725	8,067,748
42	5	489,900	7,547,023
43	6	462,671	7,057,123
44	7	437,966	6,594,452
45	8	415,055	6,156,486
46	9	393,724	5,741,431
47	10	373,701	5,347,707
48	11	354,769	4,974,006
49	12	336,750	4,619,237
50	13	319,502	4,282,487
51	14	302,917	3,962,985
52	15	286,750	3,660,068
53	16	271,080	3,373,318
54	17	255,877	3,102,238
55	18	241,115	2,846,361
56	19	226,780	2,605,246
57	20	212,865	2,378,466
58	21	199,366	2,165,601
59	22	186,387	1,966,235
60	23	173,909	1,779,848
61	24	161,913	1,605,939
62	25	150,382	1,444,026
63	26	139,301	1,293,644
64	27	128,658	1,154,343
65	28	118,444	1,025,685
66	29	108,652	907,241
67	30	99,278·4	798,588·7
68	31	90,323·4	699,310·3
69	32	81,789·5	608,986·9
70	33	73,681·5	527,197·4
71	34	66,006·0	453,515·9
72	35	58,770·9	387,509·9
73	36	51,984·5	328,739·0
74	37	45,654·7	276,754·5
75	38	39,788·0	231,099·8
76	39	34,389·1	191,311·8
77	40	29,459·4	156,922·7
78	41	24,996·8	127,463·3
79	42	20,994·9	102,466·5
80	43	17,442·7	81,471·6
81	44	14,324·3	64,028·9
82	45	11,619·0	49,704·6
83	46	9,301·80	38,085·64
84	47	7,343·88	28,783·84
85	48	5,713·32	21,439·96
86	49	4,376·11	15,726·64
87	50	3,297·22	11,350·53
88	51	2,441·62	8,053·31
89	52	1,774·33	5,611·69
90	53	1,264·72	3,837·36
91	54	883·358	2,572·642
92	55	603·987	1,689·284
93	56	403·840	1,085·297
94	57	263·756	681·457
95	58	168·078	417·701
96	59	104·379	249·623
97	60	63·0910	145·2438
98	61	37·0694	82·1528
99	62	21·1434	45·0834
100	63	11·6908	23·9400
101	64	6·2575	12·2492
102	65	3·2374	5·9917
103	66	1·6165	2·7543
104	67	·7778	1·1378
105	68	·3600	·3600

Difference of Age 70 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
70	0	208,000	1,221,757
71	1	157,541	1,013,757
72	2	132,712	856,216
73	3	114,511	723,504
74	4	99,317·4	608,993·2
75	5	86,034·1	509,675·8
76	6	74,256·1	423,641·7
77	7	63,724·5	349,385·6
78	8	54,280·2	285,661·1
79	9	45,856·1	231,380·9
80	10	38,382·7	185,524·8
81	11	31,799·4	147,142·1
82	12	26,050·2	115,342·7
83	13	21,080·6	89,292·5
84	14	16,834·7	68,211·9
85	15	13,254·1	51,377·2
86	16	10,277·7	38,123·1
87	17	7,841·94	27,845·41
88	18	5,881·86	20,003·47
89	19	4,332·67	14,121·61
90	20	3,131·37	9,788·94
91	21	2,218·41	6,657·57
92	22	1,539·95	4,439·16
93	23	1,046·44	2,899·21
94	24	695·392	1,852·767
95	25	451·459	1,157·375
96	26	286·041	705·916
97	27	176·685	419·875
98	28	106·281	243·190
99	29	62·1890	136·9092
100	30	35·3573	74·7202
101	31	19·5095	39·3629
102	32	10·4351	19·8534
103	33	5·4038	9·4183
104	34	2·7059	4·0145
105	35	1·3086	1·3086

JOINT LIVES:—TWO MALES.

Difference of Age 38 Years.

Difference of Age 69 Years.

Difference of Age 38 Years.

Ages x	Ages y	$D_{x, y}$	$N_{x, y}$
38	0	814,074	10,321,077
39	1	652,991	9,507,003
40	2	585,749	8,854,012
41	3	541,390	8,268,263
42	4	506,215	7,726,873
43	5	476,029	7,220,658
44	6	449,349	6,744,629
45	7	425,129	6,295,280
46	8	402,661	5,870,151
47	9	381,733	5,467,490
48	10	362,085	5,085,757
49	11	343,502	4,723,672
50	12	325,813	4,380,170
51	13	308,882	4,054,357
52	14	292,439	3,745,475
53	15	276,547	3,453,036
54	16	261,157	3,176,489
55	17	246,232	2,915,332
56	18	231,745	2,669,100
57	19	217,680	2,437,355
58	20	204,024	2,219,675
59	21	190,778	2,015,651
60	22	178,037	1,824,873
61	23	165,785	1,646,836
62	24	154,005	1,481,051
63	25	142,682	1,327,046
64	26	131,804	1,184,364
65	27	121,362	1,052,560
66	28	111,348	931,198
67	29	101,762	819,850
68	30	92,601·2	718,088·2
69	31	83,869·7	625,487·0
70	32	75,572·4	541,617·3
71	33	67,716·1	466,044·9
72	34	60,309·0	398,328·8
73	35	53,359·6	338,019·8
74	36	46,876·2	284,660·2
75	37	40,865·6	237,784·0
76	38	35,332·5	196,918·4
77	39	30,278·8	161,585·9
78	40	25,702·3	131,307·1
79	41	21,596·8	105,604·8
80	42	17,951·0	84,008·0
81	43	14,749·0	66,057·0
82	44	11,969·8	51,308·0
83	45	9,588·13	39,338·15
84	46	7,574·56	29,750·02
85	47	5,896·62	22,175·46
86	48	4,519·65	16,278·84
87	49	3,407·90	11,759·19
88	50	2,525·57	8,351·29
89	51	1,837·91	5,825·72
90	52	1,311·38	3,987·81
91	53	916·924	2,676·426
92	54	627·644	1,759·502
93	55	420·167	1,131·858
94	56	274·784	711·691
95	57	175·361	436·907
96	58	109·078	261·546
97	59	66·0499	152·4679
98	60	38·8858	86·4180
99	61	22·2291	47·5322
100	62	12·3217	25·3031
101	63	6·6134	12·9814
102	64	3·4321	6·3680
103	65	1·7195	2·9359
104	66	·8304	1·2164
105	67	·3860	·3860

Difference of Age 69 Years.

Ages x	Ages y	$D_{x, y}$	$N_{x, y}$
69	0	225,111	1,372,140
70	1	171,420	1,147,029
71	2	145,249	975,609
72	3	126,124	830,360
73	4	110,140	704,236
74	5	96,116·5	594,096·3
75	6	83,619·8	497,979·8
76	7	72,375·0	414,360·0
77	8	62,214·6	341,985·0
78	9	53,075·4	279,770·4
79	10	44,891·3	226,695·0
80	11	37,607·2	181,803·7
81	12	31,174·3	144,196·5
82	13	25,545·7	113,022·2
83	14	20,673·5	87,476·5
84	15	16,507·2	66,803·0
85	16	12,992·1	50,295·8
86	17	10,069·9	37,303·7
87	18	7,678·97	27,233·80
88	19	5,755·84	19,554·83
89	20	4,236·84	13,798·99
90	21	3,059·87	9,562·15
91	22	2,167·36	6,502·28
92	23	1,504·24	4,334·92
93	24	1,021·99	2,830·68
94	25	679·031	1,808·690
95	26	440·762	1,129·659
96	27	279·215	688·897
97	28	172·437	409·682
98	29	103·707	237·245
99	30	60·6714	133·5377
100	31	34·4876	72·8663
101	32	19·0256	38·3787
102	33	10·1740	19·3531
103	34	5·2673	9·1791
104	35	2·6369	3·9118
105	36	1·2749	1·2749

JOINT LIVES:—Two Males.

Difference of Age 39 Years.

Difference of Age 68 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 39 Years.**	
39	0	792,336	9,916,192
40	1	635,320	9,123,856
41	2	569,671	8,488,536
42	3	526,304	7,918,865
43	4	491,882	7,392,561
44	5	462,322	6,900,679
45	6	436,178	6,438,357
46	7	412,433	6,002,179
47	8	390,398	5,589,746
48	9	369,867	5,199,348
49	10	350,585	4,829,481
50	11	332,346	4,478,896
51	12	314,983	4,146,550
52	13	298,197	3,831,567
53	14	282,033	3,533,370
54	15	266,423	3,251,337
55	16	251,313	2,984,914
56	17	236,664	2,733,601
57	18	222,445	2,496,937
58	19	208,639	2,274,492
59	20	195,235	2,065,853
60	21	182,231	1,870,618
61	22	169,721	1,688,387
62	23	157,689	1,518,666
63	24	146,120	1,360,977
64	25	135,003	1,214,857
65	26	124,329	1,079,854
66	27	114,091	955,525
67	28	104,287	841,434
68	29	94,917·4	737,146·9
69	30	85,984·7	642,229·5
70	31	77,494·5	556,244·8
71	32	69,453·9	478,750·3
72	33	61,871·4	409,296·4
73	34	54,756·1	347,425·0
74	35	48,116·2	292,668·9
75	36	41,959·0	244,552·7
76	37	36,289·4	202,593·7
77	38	31,109·5	166,304·3
78	39	26,417·2	135,194·8
79	40	22,206·3	108,777·6
80	41	18,465·5	86,571·3
81	42	15,178·7	68,105·8
82	43	12,324·7	52,927·1
83	44	9,877·66	40,602·35
84	45	7,807·72	30,724·69
85	46	6,081·83	22,916·97
86	47	4,664·65	16,835·14
87	48	3,519·68	12,170·49
88	49	2,610·35	8,650·81
89	50	1,901·11	6,040·46
90	51	1,358·37	4,139·35
91	52	950·753	2,780·981
92	53	651·493	1,830·228
93	54	436·624	1,178·735
94	55	285·893	742·111
95	56	182·692	456·218
96	57	113·804	273·526
97	58	69·0233	159·7215
98	59	40·7095	90·6982
99	60	23·3183	49·9887
100	61	12·9544	26·6704
101	62	6·9703	13·7160
102	63	3·6273	6·7457
103	64	1·8229	3·1184
104	65	·8834	1·2955
105	66	·4121	·4121

Difference of Age 68 Years.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
68	0	242,434	1,532,453
69	1	185,522	1,290,019
70	2	158,045	1,104,497
71	3	138,038	946,452
72	4	121,310	808,414
73	5	106,591	687,104
74	6	93,419·3	580,512·9
75	7	81,501·6	487,093·6
76	8	70,660·1	405,592·0
77	9	60,833·8	334,931·9
78	10	51,958·7	274,098·1
79	11	43,984·3	222,139·4
80	12	36,868·0	178,155·1
81	13	30,570·5	141,287·1
82	14	25,052·3	110,716·6
83	15	20,271·3	85,664·3
84	16	16,180·9	65,393·0
85	17	12,729·4	49,212·1
86	18	9,860·64	36,482·67
87	19	7,514·45	26,622·03
88	20	5,628·53	19,107·58
89	21	4,140·10	13,479·05
90	22	2,989·45	9,338·95
91	23	2,117·10	6,349·50
92	24	1,469·11	4,232·40
93	25	997·948	2,763·293
94	26	662·941	1,765·345
95	27	430·242	1,102·404
96	28	272·503	672·162
97	29	168·261	399·659
98	30	101·176	231·398
99	31	59·1791	130·2215
100	32	33·6322	71·0424
101	33	18·5496	37·4102
102	34	9·9170	18·8606
103	35	5·1330	8·9436
104	36	2·5690	3·8106
105	37	1·2416	1·2416

JOINT LIVES:—Two Males.

Difference of Age 40 Years.

Difference of Age 67 Years.

Difference of Age 40 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
40	0	770,894	9,518,796
41	1	617,881	8,747,902
42	2	553,796	8,130,021
43	3	511,402	7,576,225
44	4	477,719	7,064,823
45	5	448,771	6,587,104
46	6	423,152	6,138,333
47	7	399,873	5,715,181
48	8	378,262	5,315,308
49	9	358,120	4,937,046
50	10	339,200	4,578,926
51	11	321,299	4,239,726
52	12	304,087	3,918,427
53	13	287,587	3,614,340
54	14	271,709	3,326,753
55	15	256,381	3,055,044
56	16	241,548	2,798,663
57	17	227,166	2,557,115
58	18	213,207	2,329,949
59	19	199,651	2,116,742
60	20	186,489	1,917,091
61	21	173,719	1,730,602
62	22	161,432	1,556,883
63	23	149,615	1,395,451
64	24	138,256	1,245,836
65	25	127,346	1,107,580
66	26	116,880	980,234
67	27	106,856	863,354
68	28	97,273·1	756,497·5
69	29	88,135·4	659,224·4
70	30	79,448·7	571,089·0
71	31	71,220·3	491,640·3
72	32	63,459·2	420,420·0
73	33	56,174·7	356,960·8
74	34	49,375·4	300,786·1
75	35	43,068·9	251,410·7
76	36	37,260·4	208,341·8
77	37	31,952·0	171,081·4
78	38	27,142·0	139,129·4
79	39	22,824·0	111,987·4
80	40	18,986·7	89,163·4
81	41	15,613·8	70,176·7
82	42	12,683·8	54,562·9
83	43	10,170·5	41,879·1
84	44	8,043·48	31,708·58
85	45	6,269·05	23,665·10
86	46	4,811·18	17,396·05
87	47	3,632·60	12,584·87
88	48	2,695·97	8,952·27
89	49	1,964·92	6,256·30
90	50	1,405·07	4,291·38
91	51	984·821	2,886·307
92	52	675·530	1,901·486
93	53	453·215	1,225·956
94	54	297·091	772·741
95	55	190·078	475·650
96	56	118·562	285·572
97	57	72·0140	167·0099
98	58	42·5421	94·9959
99	59	24·4119	52·4538
100	60	13·5891	28·0419
101	61	7·3282	14·4528
102	62	3·8231	7·1246
103	63	1·9266	3·3015
104	64	·9365	1·3749
105	65	·4384	·4384

Difference of Age 67 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
67	0	259,915	1,702,576
68	1	199,798	1,442,661
69	2	171,047	1,242,863
70	3	150,199	1,071,816
71	4	132,769	921,617
72	5	117,400	788,848
73	6	103,600	671,448
74	7	91,052·8	567,847·7
75	8	79,570·4	476,794·9
76	9	69,091·9	397,224·5
77	10	59,553·9	328,132·6
78	11	50,908·9	268,578·7
79	12	43,119·7	217,669·8
80	13	36,153·9	174,550·1
81	14	29,980·1	138,396·2
82	15	24,565·0	108,416·1
83	16	19,870·7	83,851·1
84	17	15,853·7	63,980·4
85	18	12,464·9	48,126·7
86	19	9,649·37	35,661·79
87	20	7,348·24	26,012·42
88	21	5,500·02	18,664·18
89	22	4,044·82	13,164·16
90	23	2,920·13	9,119·34
91	24	2,067·65	6,199·21
92	25	1,434·54	4,131·56
93	26	974·300	2,697·024
94	27	647·119	1,722·724
95	28	419·900	1,075·605
96	29	265·904	655·705
97	30	164·155	389·801
98	31	98·6876	225·6464
99	32	57·7113	126·9588
100	33	32·7907	69·2475
101	34	18·0811	36·4568
102	35	9·6641	18·3757
103	36	5·0007	8·7116
104	37	2·5020	3·7109
105	38	1·2089	1·2089

JOINT LIVES:—Two Males.

Difference of Age 41 Years.

Difference of Age 66 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 41 Years.**	
41	0	749,734	9,128,852
42	1	600,663	8,379,118
43	2	538,116	7,778,455
44	3	496,677	7,240,339
45	4	463,716	6,743,662
46	5	435,370	6,279,946
47	6	410,266	5,844,576
48	7	387,442	5,434.310
49	8	366,249	5,046,868
50	9	346,490	4,680,619
51	10	327,925	4,334,129
52	11	310,184	4,006,204
53	12	293,267	3.696,020
54	13	277,059	3,402,753
55	14	261,467	3,125,694
56	15	246,418	2,864,227
57	16	231,854	2,617,809
58	17	217,732	2,385.955
59	18	204,023	2,168,223
60	19	190,707	1,964,200
61	20	177,778	1,773,493
62	21	165,235	1,595.715
63	22	153,167	1,430,480
64	23	141,563	1,277,313
65	24	130,415	1,135,750
66	25	119,717	1,005,335
67	26	109,468	885,618
68	27	99,669·0	776.150·1
69	28	90,322·8	676.481·1
70	29	81,435·9	586,158·3
71	30	73,016·3	504,722·4
72	31	65,073·2	431,706·1
73	32	57,616·3	366,632·9
74	33	50,654·6	309,016·6
75	34	44,196·0	258,362·0
76	35	38,246·0	214,166·0
77	36	32,806·9	175,920·0
78	37	27,877·1	143.113·1
79	38	23,450·1	115,236·0
80	39	19,514·8	91,785·9
81	40	16,054·5	72,271·1
82	41	13,047·4	56,216·6
83	42	10,466·9	43,169·2
84	43	8,281·96	32,702·30
85	44	6,458·35	24,420·34
86	45	4,959·27	17,961·99
87	46	3,746·70	13,002·72
88	47	2,782·46	9,256·02
89	48	2,029·37	6,473·56
90	49	1,452·24	4,444·19
91	50	1,018·68	2,991·95
92	51	699·736	1,973·269
93	52	469·936	1,273·533
94	53	308·380	803·597
95	54	197·523	495·217
96	55	123·355	297·694
97	56	75·0249	174·3393
98	57	44·3855	99·3144
99	58	25·5108	54·9289
100	59	14·2264	29·4181
101	60	7·6873	15·1917
102	61	4·0194	7·5044
103	62	2·0306	3·4850
104	63	·9897	1·4544
105	64	·4647	·4647
		Difference of Age 66 Years.	
66	0	277,513	1,882,367
67	1	214,205	1,604,854
68	2	184,209	1,390,649
69	3	162,555	1,206,440
70	4	144,466	1,043,885
71	5	128,490	899,419
72	6	114,106	770,929
73	7	100,975	656,823
74	8	88,895·3	555,848·3
75	9	77,804·4	466,953·0
76	10	67,638·1	389,148·6
77	11	58,350·6	321,510·5
78	12	49,908·2	263,159·9
79	13	42,284·5	213,251·7
80	14	35,455·7	170,967·2
81	15	29,396·9	135,511·5
82	16	24,079·4	106,114·6
83	17	19,468·9	82,035·2
84	18	15,524·3	62,566·3
85	19	12,197·8	47,042·0
86	20	9,435·95	34,844·20
87	21	7,180·46	25,408·25
88	22	5,373·44	18,227·79
89	23	3,951·02	12,854·35
90	24	2,851·92	8,903·33
91	25	2,019·00	6,051·41
92	26	1,400·55	4,032·41
93	27	951·048	2,631·862
94	28	631·563	1,680·814
95	29	409·731	1,049·251
96	30	259·415	639·520
97	31	160·117	380·105
98	32	96·2399	219·9879
99	33	56·2673	123·7480
100	34	31·9626	67·4807
101	35	17·6200	35·5181
102	36	9·4151	17·8981
103	37	4·8704	8·4830
104	38	2·4360	3·6126
105	39	1·1766	1·1766

JOINT LIVES:—Two Males.

Difference of Age 42 Years.

Difference of Age 65 Years.

Difference of Age 42 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
42	0	728,842	8,746,335
43	1	583,656	8,017,493
44	2	522,621	7,433,837
45	3	482,119	6,911,216
46	4	449,868	6,429,097
47	5	422,111	5,979,229
48	6	397,512	5,557,118
49	7	375,137	5,159,606
50	8	354,354	4,784,469
51	9	334,973	4,430,115
52	10	316,581	4,095,142
53	11	299,148	3,778,561
54	12	282,532	3,479,413
55	13	266,616	3,196,881
56	14	251,307	2,930,265
57	15	236,529	2,678,958
58	16	222,225	2,442,429
59	17	208,352	2,220,204
60	18	194,883	2,011,852
61	19	181,799	1,816,969
62	20	169,096	1,635,170
63	21	156,775	1,466,074
64	22	144,923	1,309,299
65	23	133,534	1,164,376
66	24	122,602	1,030,842
67	25	112,125	908,240
68	26	102,106	796,115
69	27	92,547·5	694,008·9
70	28	83,457·0	601,461·4
71	29	74,842·7	518,004·4
72	30	66,714·2	443,161·7
73	31	59,081·7	376,447·5
74	32	51,954·5	317,365·8
75	33	45,341·1	265,411·3
76	34	39,246·9	220,070·2
77	35	33,674·8	180,823·3
78	36	28,622·9	147,148·5
79	37	24,085·2	118,525·6
80	38	20,050·2	94,440·4
81	39	16,501·1	74,390·2
82	40	13,415·7	57,889·1
83	41	10,766·9	44,473·4
84	42	8,523·28	33,706·50
85	43	6,649·82	25,183·22
86	44	5,109·02	18,533·40
87	45	3,862·04	13,424·38
88	46	2,869·86	9,562·34
89	47	2,094·48	6,692·48
90	48	1,499·87	4,598·00
91	49	1,052·87	3,098·13
92	50	723·794	2,045·259
93	51	486·775	1,321·465
94	52	319·758	834·690
95	53	205·029	514·932
96	54	128·187	309·903
97	55	78·0581	181·7156
98	56	46·2412	103·6575
99	57	26·6162	57·4163
100	58	14·8669	30·8001
101	59	8·0478	15·9332
102	60	4·2163	7·8854
103	61	2·1348	3·6691
104	62	1·0431	1·5343
105	63	·4912	·4912

Difference of Age 65 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
65	0	295,198	2,071,672
66	1	228,708	1,776,474
67	2	197,491	1,547,766
68	3	175,064	1,350,275
69	4	156,351	1,175,211
70	5	139,810	1,018,860
71	6	124,885	879,050
72	7	111,215	754,165
73	8	98,582·7	642,949·7
74	9	86,922·4	544,367·0
75	10	76,167·4	457,444·6
76	11	66,271·6	381,277·2
77	12	57,203·6	315,005·6
78	13	48,941·5	257,802·0
79	14	41,467·9	208,860·5
80	15	34,766·0	167,392·6
81	16	28,815·8	132,626·6
82	17	23,592·6	103,810·8
83	18	19,064·3	80,218·2
84	19	15,191·7	61,153·9
85	20	11,928·0	45,962·2
86	21	9,220·49	34,034·16
87	22	7,015·21	24,813·67
88	23	5,248·84	17,798·46
89	24	3,858·73	12,549·62
90	25	2,784·82	8,690·89
91	26	1,971·16	5,906·07
92	27	1,367·12	3,934·91
93	28	928·186	2,567·787
94	29	616·269	1,639·601
95	30	399·733	1,023·332
96	31	253·034	623·599
97	32	156·146	370·565
98	33	93·8318	214·4190
99	34	54·8463	120·5872
100	35	31·1475	65·7409
101	36	17·1659	34·5934
102	37	9·1697	17·4275
103	38	4·7420	8·2578
104	39	2·3710	3·5158
105	40	1·1448	1·1448

JOINT LIVES:—Two Males.

Difference of Age 43 Years.

Difference of Age 64 Years.

Difference of Age 43 Years.

Ages x	y	$D_{x,y}$	$N_{x,y}$
43	0	708,205	8,371,230
44	1	566,850	7,663,025
45	2	507,303	7,096,175
46	3	467,721	6,588,872
47	4	436,168	6,121,151
48	5	408,989	5,684,983
49	6	384,888	5,275,994
50	7	362,954	4,891,106
51	8	342,576	4,528,152
52	9	323,385	4,185,576
53	10	305,316	3,862,191
54	11	288,197	3,556,875
55	12	271,882	3,268,678
56	13	256,256	2,996,796
57	14	241,222	2,740,540
58	15	226,706	2,499,318
59	16	212,652	2,272,612
60	17	199,019	2,059,960
61	18	185,780	1,860,941
62	19	172,921	1,675,161
63	20	160,438	1,502,240
64	21	148,337	1,341,802
65	22	136,704	1,193,465
66	23	125,534	1,056,761
67	24	114,827	931,227
68	25	104,584	816,400
69	26	94,810·3	711,815·9
70	27	85,512·6	617,005·6
71	28	76,700·1	531,493·0
72	29	68,382·9	454,792·9
73	30	60,571·6	386,410·0
74	31	53,275·9	325,838·4
75	32	46,504·6	272,562·5
76	33	40,263·7	226,057·9
77	34	34,556·0	185,794·2
78	35	29,380·1	151,238·2
79	36	24,729·7	121,858·1
80	37	20,593·2	97,128·4
81	38	16,953·8	76,535·2
82	39	13,788·8	59,581·4
83	40	11,070·8	45,792·6
84	41	8,767·60	34,721·82
85	42	6,843·59	25,954·22
86	43	5,260·50	19,110·63
87	44	3,978·65	13,850·13
88	45	2,958·20	9,871·48
89	46	2,160·27	6,913·28
90	47	1,547·99	4,753·01
91	48	1,087·41	3,205·02
92	49	748·090	2,117·612
93	50	503·512	1,369·522
94	51	331·215	866·010
95	52	212·593	534·795
96	53	133·058	322·202
97	54	81·1155	189·1442
98	55	48·1107	108·0287
99	56	27·7290	59·9180
100	57	15·5111	32·1890
101	58	8·4101	16·6779
102	59	4·4140	8·2678
103	60	2·2394	3·8538
104	61	1·0967	1·6144
105	62	·5177	·5177

Difference of Age 64 Years.

Ages x	y	$D_{x,y}$	$N_{x,y}$
64	0	312,947	2,270,318
65	1	243,283	1,957,371
66	2	210,863	1,714,088
67	3	187,687	1,503,225
68	4	168,382	1,315,538
69	5	151,312	1,147,156
70	6	135,886	995,844
71	7	121,721	859,958
72	8	108,580	738,237
73	9	96,394·7	629,657·2
74	10	85,093·5	533,262·5
75	11	74,628·5	448,169·0
76	12	64,968·8	373,540·5
77	13	56,095·6	308,571·7
78	14	47,996·4	252,476·1
79	15	40,661·2	204,479·7
80	16	34,078·8	163,818·5
81	17	28,233·2	129,739·7
82	18	23,102·3	101,506·5
83	19	18,655·9	78,404·2
84	20	14,855·6	59,748·3
85	21	11,655·7	44,892·7
86	22	9,008·30	33,236·99
87	23	6,852·54	24,228·69
88	24	5,126·23	17,376·15
89	25	3,767·94	12,249·92
90	26	2,718·83	8,481·98
91	27	1,924·12	5,763·15
92	28	1,334·26	3,839·03
93	29	905·708	2,504·772
94	30	601·230	1,599·064
95	31	389·900	997·834
96	32	246·758	607·934
97	33	152·239	361·176
98	34	91·4623	208·9367
99	35	53·4476	117·4744
100	36	30·3448	64·0268
101	37	16·7186	33·6820
102	38	8·9279	16·9634
103	39	4·6154	8·0355
104	40	2·3068	3·4201
105	41	1·1133	1·1133

JOINT LIVES:—Two Males.

Difference of Age 44 Years.

Difference of Age 63 Years.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Difference of Age 44 Years.**	
44	0	687,813	8,003,525
45	1	550,235	7,315,712
46	2	492,153	6,765,477
47	3	453,477	6,273,324
48	4	422,609	5,819,847
49	5	396,000	5,397,238
50	6	372,388	5,001,238
51	7	350,890	4,628,850
52	8	330,725	4,277,960
53	9	311,878	3,947,235
54	10	294,140	3,635,357
55	11	277,334	3,341,217
56	12	261,317	3,063,883
57	13	245,972	2,802,566
58	14	231,204	2,556,594
59	15	216,940	2,325,390
60	16	203,126	2,108,450
61	17	189,722	1,905,324
62	18	176,707	1,715,602
63	19	164,067	1,538,895
64	20	151,803	1,374,828
65	21	139,924	1,223,025
66	22	128,514	1,083,101
67	23	117,573	954,587
68	24	107,104	837,014
69	25	97,111·4	729,910·4
70	26	87,603·3	632,799·0
71	27	78,589·3	545,195·7
72	28	70,080·1	466,606·4
73	29	62,086·6	396,526·3
74	30	54,619·4	334,439·7
75	31	47,687·4	279,820·3
76	32	41,297·0	232,132·9
77	33	35,451·3	190,835·9
78	34	30,149·0	155,384·6
79	35	25,383·8	125,235·6
80	36	21,144·2	99,851·8
81	37	17,412·9	78,707·6
82	38	14,167·1	61,294·7
83	39	11,378·7	47,127·6
84	40	9,015·06	35,748·87
85	41	7,039·76	26,733·81
86	42	5,413·78	19,694·05
87	43	4,096·61	14,280·27
88	44	3,047·53	10,183·66
89	45	2,226·77	7,136·13
90	46	1,596·61	4,909·36
91	47	1,122·30	3,312·75
92	48	772·628	2,190·451
93	49	520·413	1,417·823
94	50	342·603	897·410
95	51	220·211	554·807
96	52	137·967	334·596
97	53	84·1978	196·6289
98	54	49·9951	112·4311
99	55	28·8501	62·4360
100	56	16·1596	33·5859
101	57	8·7745	17·4263
102	58	4·6127	8·6518
103	59	2·3445	4·0391
104	60	1·1504	1·6946
105	61	·5442	·5442

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Difference of Age 63 Years.**	
63	0	330,748	2,478,137
64	1	257,910	2,147,389
65	2	224,301	1,889,479
66	3	200,395	1,665,178
67	4	180,523	1,464,783
68	5	162,955	1,284,260
69	6	147,065	1,121,305
70	7	132,444	974,240
71	8	118,837	841,796
72	9	106,170	722,959
73	10	94,366·5	616,788·5
74	11	83,374·3	522,422·0
75	12	73,161·5	439,047·7
76	13	63,710·5	365,886·2
77	14	55,012·3	302,175·7
78	15	47,062·7	247,163·4
79	16	39,857·5	200,100·7
80	17	33,389·7	160,243·2
81	18	27,646·5	126,853·5
82	19	22,607·3	99,207·0
83	20	18,243·2	76,599·7
84	21	14,516·4	58,356·5
85	22	11,387·4	43,840·1
86	23	8,799·40	32,452·70
87	24	6,692·47	23,653·30
88	25	5,005·62	16,960·83
89	26	3,678·66	11,955·21
90	27	2,653·94	8,276·55
91	28	1,877·86	5,622·61
92	29	1,301·95	3,744·75
93	30	883·606	2,442·795
94	31	586·442	1,559·189
95	32	380·230	972·747
96	33	240·584	592·517
97	34	148·395	351·933
98	35	89·1297	203·5375
99	36	52·0702	114·4078
100	37	29·5541	62·3376
101	38	16·2777	32·7835
102	39	8·6895	16·5058
103	40	4·4905	7·8163
104	41	2·2435	3·3258
105	42	1·0823	1·0823

JOINT LIVES:—Two Males.

Difference of Age 45 Years.

Difference of Age 62 Years.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Difference of Age 45 Years.**	
45	0	667,652	7,643,227
46	1	533,803	6,975,575
47	2	477,165	6,441,772
48	3	439,381	5,964,607
49	4	409,188	5,525,226
50	5	383,139	5,116,038
51	6	360,010	4,732,899
52	7	338,752	4,372,889
53	8	318,957	4,034,137
54	9	300,461	3,715,180
55	10	283,053	3,414,719
56	11	266,557	3,131,666
57	12	250,830	2,865,109
58	13	235,757	2,614,279
59	14	221,244	2,378,522
60	15	207,222	2,157,278
61	16	193,637	1,950,056
62	17	180,457	1,756,419
63	18	167,659	1,575,962
64	19	155,237	1,408,303
65	20	143,194	1,253,066
66	21	131,542	1,109,872
67	22	120,364	978,330
68	23	109,666	857,966
69	24	99,451·2	748,299·9
70	25	89,729·6	648,848·7
71	26	80,510·8	559,119·1
72	27	71,806·2	478,608·3
73	28	63,627·5	406,802·1
74	29	55,985·6	343,174·6
75	30	48,890·0	287,189·0
76	31	42,347·4	238,299·0
77	32	36,361·1	195,951·6
78	33	30,930·1	159,590·5
79	34	26,048·1	128,660·4
80	35	21,703·5	102,612·3
81	36	17,878·8	80,908·8
82	37	14,550·8	63,030·0
83	38	11,690·9	48,479·2
84	39	9,265·81	36,788·27
85	40	7,238·45	27,522·46
86	41	5,568·97	20,284·01
87	42	4,215·98	14,715·04
88	43	3,137·88	10,499·06
89	44	2,294·00	7,361·18
90	45	1,645·76	5,067·18
91	46	1,157·55	3,421·42
92	47	797·416	2,263·867
93	48	537·483	1,466·451
94	49	354·103	928·968
95	50	227·783	574·865
96	51	142·911	347·082
97	52	87·3042	204·1713
98	53	51·8948	116·8671
99	54	29·9801	64·9723
100	55	16·8129	34·9922
101	56	9·1414	18·1793
102	57	4·8126	9·0379
103	58	2·4500	4·2253
104	59	1·2044	1·7753
105	60	·5709	·5709

Difference of Age 62 Years.

Ages		$D_{x,y}$	$N_{x,y}$
x	y		
62	0	348,596	2,694,962
63	1	272,581	2,346,366
64	2	237,787	2,073,785
65	3	213,166	1,835,998
66	4	192,746	1,622,832
67	5	174,705	1,430,086
68	6	158,382	1,255,381
69	7	143,340	1,096,999
70	8	129,306	953,659
71	9	116,200	824,353
72	10	103,936	708,153
73	11	92,459·9	604,217·1
74	12	81,735·3	511,757·2
75	13	71,744·4	430,021·9
76	14	62,480·1	358,277·5
77	15	53,942·1	295,797·4
78	16	46,132·4	241,855·3
79	17	39,051·7	195,722·9
80	18	32,695·9	156,671·2
81	19	27,054·2	123,975·3
82	20	22,107·3	96,921·1
83	21	17,826·7	74,813·8
84	22	14,182·4	56,987·1
85	23	11,123·4	42,804·7
86	24	8,593·86	31,681·28
87	25	6,535·01	23,087·42
88	26	4,887·01	16,552·41
89	27	3,590·86	11,665·40
90	28	2,590·15	8,074·54
91	29	1,832·39	5,484·39
92	30	1,270·18	3,652·00
93	31	861·872	2,381·820
94	32	571·896	1,519·948
95	33	370·716	948·052
96	34	234·508	577·336
97	35	144·610	342·828
98	36	86·8328	198·2183
99	37	50·7133	111·3855
100	38	28·7748	60·6722
101	39	15·8431	31·8974
102	40	8·4544	16·0543
103	41	4·3672	7·5999
104	42	2·1810	3·2327
105	43	1·0517	1·0517

JOINT LIVES:—Two Males.

Difference of Age 46 Years.

Difference of Age 61 Years.

Ages x	Ages y	$D_{x,y}$ Difference of Age 46 Years.	$N_{x,y}$ Difference of Age 46 Years.
46	0	647,714	7,290,338
47	1	517,547	6,642,624
48	2	462,332	6,125,077
49	3	425,426	5,662,745
50	4	395,899	5,237,319
51	5	370,404	4,841,420
52	6	347,556	4,471,016
53	7	326,698	4,123,460
54	8	307,281	3,796,762
55	9	289,136	3,489,481
56	10	272,054	3,200,345
57	11	255,860	2,928,291
58	12	240,413	2,672,431
59	13	225,601	2,432,018
60	14	211,333	2,206,417
61	15	197,542	1,995,084
62	16	184,181	1,797,542
63	17	171,217	1,613,361
64	18	158,636	1,442,144
65	19	146,433	1,283,508
66	20	134,615	1,137,075
67	21	123,200	1,002,460
68	22	112,269	879,260
69	23	101,830	766,991
70	24	91,891·6	665,160·6
71	25	82,464·9	573,269·0
72	26	73,561·8	490,804·1
73	27	65,194·7	417,242·3
74	28	57,375·1	352,047·6
75	29	50,112·9	294,672·5
76	30	43,415·3	244,559·6
77	31	37,285·9	201,144·3
78	32	31,723·8	163,858·4
79	33	26,723·0	132,134·6
80	34	22,271·5	105,411·6
81	35	18,351·8	83,140·1
82	36	14,940·1	64,788·3
83	37	12,007·5	49,848·2
84	38	9,520·02	37,840·70
85	39	7,439·79	28,320·68
86	40	5,726·15	20,880·89
87	41	4,336·83	15,154·74
88	42	3,229·32	10,817·91
89	43	2,362·02	7,588·59
90	44	1,695·46	5,226·57
91	45	1,193·18	3,531·11
92	46	822·463	2,337·930
93	47	554·727	1,515·467
94	48	365·718	960·740
95	49	235·428	595·022
96	50	147·824	359·594
97	51	90·4325	211·7700
98	52	53·8065	121·3375
99	53	31·1193	67·5280
100	54	17·4714	36·4087
101	55	9·5110	18·9373
102	56	5·0138	9·4263
103	57	2·5562	4·4125
104	58	1·2586	1·8563
105	59	·5977	·5977

Ages x	Ages y	$D_{x,y}$ Difference of Age 61 Years.	$N_{x,y}$ Difference of Age 61 Years.
61	0	366,495	2,920,630
62	1	287,290	2,554,135
63	2	251,312	2,266,845
64	3	225,982	2,015,533
65	4	205,029	1,789,551
66	5	186,534	1,584,522
67	6	169,803	1,397,988
68	7	154,370	1,228,185
69	8	139,944	1,073,815
70	9	126,436	933,871
71	10	113,755	807,435
72	11	101,836	693,680
73	12	90,642·4	591,843·5
74	13	80,152·2	501,201·1
75	14	70,358·9	421,048·9
76	15	61,264·7	350,690·0
77	16	52,875·9	289,425·3
78	17	45,199·7	236,549·4
79	18	38,240·1	191,349·7
80	19	31,995·3	153,109·6
81	20	26,455·8	121,114·3
82	21	21,602·5	94,658·5
83	22	17,416·4	73,056·0
84	23	13,853·5	55,639·6
85	24	10,863·5	41,786·1
86	25	8,391·66	30,922·57
87	26	6,380·16	22,530·91
88	27	4,770·37	16,150·75
89	28	3,504·54	11,380·38
90	29	2,527·42	7,875·84
91	30	1,787·67	5,348·42
92	31	1,238·93	3,560·75
93	32	840·495	2,321·822
94	33	557·587	1,481·327
95	34	361·354	923·740
96	35	228·528	562·386
97	36	140·883	333·858
98	37	84·5700	192·9752
99	38	49·3761	108·4052
100	39	28·0064	59·0291
101	40	15·4143	31·0227
102	41	8·2223	15·6084
103	42	4·2455	7·3861
104	43	2·1192	3·1406
105	44	1·0214	1·0214

JOINT LIVES:—TWO MALES.

Difference of Age 47 Years.

Difference of Age 60 Years.

Difference of Age 47 Years.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
47	0	627,989	6,944,869
48	1	501,458	6,316,880
49	2	447,649	5,815,422
50	3	411,610	5,367,773
51	4	382,739	4,956,163
52	5	357,590	4,573,424
53	6	335,189	4,215,834
54	7	314,739	3,880,645
55	8	295,699	3,565,906
56	9	277,901	3,270,207
57	10	261,136	2,992,306
58	11	245,234	2,731,170
59	12	230,057	2,485,936
60	13	215,494	2,255,879
61	14	201,461	2,040,385
62	15	187,895	1,838,924
63	16	174,750	1,651,029
64	17	162,002	1,476,279
65	18	149,638	1,314,277
66	19	137,660	1,164,639
67	20	126,078	1,026,979
68	21	114,914	900,901
69	22	104,247	785,987
70	23	94,089·4	681,740·3
71	24	84,451·8	587,650·9
72	25	75,347·3	503,199·1
73	26	66,788·7	427,851·8
74	27	58,788·3	361,063·1
75	28	51,356·6	302,274·8
76	29	44,501·2	250,918·2
77	30	38,226·1	206,417·0
78	31	32,530·7	168,190·9
79	32	27,408·8	135,660·2
80	33	22,848·5	108,251·4
81	34	18,832·0	85,402·9
82	35	15,335·3	66,570·9
83	36	12,328·8	51,235·6
84	37	9,777·84	38,906·75
85	38	7,643·90	29,128·91
86	39	5,885·42	21,485·01
87	40	4,459·24	15,599·59
88	41	3,321·88	11,140·35
89	42	2,430·84	7,818·47
90	43	1,745·72	5,387·63
91	44	1,229·21	3,641·91
92	45	847·781	2,412·704
93	46	572·151	1,564·923
94	47	377·452	992·772
95	48	243·151	615·320
96	49	152·786	372·169
97	50	93·5418	219·3829
98	51	55·7376	125·8411
99	52	32·2674	70·1035
100	53	18·1353	37·8361
101	54	9·8835	19·7008
102	55	5·2165	9·8173
103	56	2·6630	4·6008
104	57	1·3132	1·9378
105	58	·6246	·6246

Difference of Age 60 Years.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
60	0	384,453	3,154,995
61	1	302,041	2,770,542
62	2	264,874	2,468,501
63	3	238,837	2,203,627
64	4	217,357	1,964,790
65	5	198,421	1,747,433
66	6	181,300	1,549,012
67	7	165,501	1,367,712
68	8	150,712	1,202,211
69	9	136,838	1,051,499
70	10	123,776	914,661
71	11	111,456	790,885
72	12	99,834·6	679,429·0
73	13	88,886·7	579,594·4
74	14	78,604·3	490,707·7
75	15	68,990·2	412,103·4
76	16	60,053·7	343,113·2
77	17	51,806·8	283,059·5
78	18	44,260·4	231,252·7
79	19	37,420·8	186,992·3
80	20	31,287·7	149,571·5
81	21	25,851·7	118,283·8
82	22	21,105·3	92,432·1
83	23	17,012·5	71,326·8
84	24	13,529·9	54,314·3
85	25	10,607·9	40,784·4
86	26	8,192·81	30,176·49
87	27	6,227·89	21,983·68
88	28	4,655·70	15,755·79
89	29	3,419·67	11,100·09
90	30	2,465·74	7,680·42
91	31	1,743·70	5,214·68
92	32	1,208·21	3,470·98
93	33	819·465	2,262·765
94	34	543·506	1,443·300
95	35	352·138	899·794
96	36	222·638	547·656
97	37	137·212	325·018
98	38	82·3400	187·8055
99	39	48·0576	105·4655
100	40	27·2485	57·4079
101	41	14·9912	30·1594
102	42	7·9932	15·1682
103	43	4·1253	7·1750
104	44	2·0582	3·0497
105	45	·9915	·9915

JOINT LIVES:—Two Males.

Difference of Age 48 Years.

Difference of Age 59 Years.

Difference of Age 48 Years.

Ages *x*	Ages *y*	$D_{x,y}$	$N_{x,y}$
48	0	608,467	6,606,851
49	1	485,533	5,998,384
50	2	433,111	5,512,851
51	3	397,928	5,079,740
52	4	369,499	4,681,812
53	5	344,867	4,312,313
54	6	322,919	3,967,446
55	7	302,876	3,644,527
56	8	284,209	3,341,651
57	9	266,748	3,057,442
58	10	250,291	2,790,694
59	11	234,670	2,540,403
60	12	219,751	2,305,733
61	13	205,428	2,085,982
62	14	191,622	1,880,554
63	15	178,274	1,688,932
64	16	165,345	1,510,658
65	17	152,814	1,345,313
66	18	140,674	1,192,499
67	19	128,930	1,051,825
68	20	117,599	922,895
69	21	106,703	805,296
70	22	96,323·0	698,592·7
71	23	86,471·8	602,269·7
72	24	77,162·7	515,797·9
73	25	68,409·7	438,635·2
74	26	60,225·6	370,225·5
75	27	52,621·5	309,999·9
76	28	45,605·6	257,378·4
77	29	39,182·3	211,772·8
78	30	33,351·0	172,590·5
79	31	28,105·9	139,239·5
80	32	23,434·9	111,133·6
81	33	19,319·9	87,698·7
82	34	15,736·7	68,378·8
83	35	12,654·9	52,642·1
84	36	10,039·5	39,987·2
85	37	7,850·92	29,947·71
86	38	6,046·88	22,096·79
87	39	4,583·27	16,049·91
88	40	3,415·64	11,466·64
89	41	2,500·52	8,051·00
90	42	1,796·59	5,550·48
91	43	1,265·65	3,753·89
92	44	873·380	2,488·236
93	45	589·764	1,614·856
94	46	389·308	1,025·092
95	47	250·952	635·784
96	48	157·798	384·832
97	49	96·6817	227·0343
98	50	57·6540	130·3526
99	51	33·4237	72·6986
100	52	18·8044	39·2749
101	53	10·2591	20·4705
102	54	5·4209	10·2114
103	55	2·7707	4·7905
104	56	1·3681	2·0198
105	57	·6517	·6517

Difference of Age 59 Years.

Ages *x*	Ages *y*	$D_{x,y}$	$N_{x,y}$
59	0	402,484	3,397,921
60	1	316,841	2,995,437
61	2	278,474	2,678,596
62	3	251,725	2,400,122
63	4	229,720	2,148,397
64	5	210,351	1,918,677
65	6	192,853	1,708,326
66	7	176,707	1,515,473
67	8	161,580	1,338,766
68	9	147,367	1,177,186
69	10	133,959	1,029,819
70	11	121,275	895,860
71	12	109,265	774,585
72	13	97,900·9	665,319·8
73	14	87,170·2	567,418·9
74	15	77,075·2	480,248·7
75	16	67,626·5	403,173·5
76	17	58,839·5	335,547·0
77	18	50,730·2	276,707·5
78	19	43,312·1	225,977·3
79	20	36,593·1	182,665·2
80	21	30,573·3	146,072·1
81	22	25,256·8	115,498·8
82	23	20,615·9	90,242·0
83	24	16,615·1	69,626·1
84	25	13,211·6	53,011·0
85	26	10,356·6	39,799·4
86	27	7,997·29	29,442·79
87	28	6,078·18	21,445·50
88	29	4,542·95	15,367·32
89	30	3,336·23	10,824·37
90	31	2,405·09	7,488·14
91	32	1,700·45	5,083·05
92	33	1,177·98	3,382·60
93	34	798·771	2,204·617
94	35	529·645	1,405·846
95	36	343·064	876·201
96	37	216·837	533·137
97	38	133·594	316·300
98	39	80·1413	182·7055
99	40	46·7571	102·5642
100	41	26·5005	55·8071
101	42	14·5735	29·3066
102	43	7·7669	14·7331
103	44	4·0065	6·9662
104	45	1·9979	2·9597
105	46	·9618	·9618

JOINT LIVES:—Two Males.

Difference of Age 49 Years.

Difference of Age 58 Years.

Difference of Age 49 Years.

Ages x	Ages y	$D_{x, y}$	$N_{x, y}$
49	0	589,143	6,276,302
50	1	469,764	5,687,159
51	2	418,715	5,217,395
52	3	384,163	4,798,680
53	4	356,352	4,414,517
54	5	332,242	4,058,165
55	6	310,748	3,725,923
56	7	291,106	3,415,175
57	8	272,803	3,124,069
58	9	255,670	2,851,266
59	10	239,509	2,595,596
60	11	224,157	2,356,087
61	12	209,486	2,131,930
62	13	195,396	1,922,444
63	14	181,811	1,727,048
64	15	168,680	1,545,237
65	16	155,968	1,376,557
66	17	143,659	1,220,589
67	18	131,753	1,076,930
68	19	120,259	945,177
69	20	109,196	824,918
70	21	98,592·0	715,721·6
71	22	88,524·5	617,129·6
72	23	79,008·3	528,605·1
73	24	70,058·0	449,596·8
74	25	61,687·4	379,538·8
75	26	53,908·1	317,851·4
76	27	46,729·0	263,943·3
77	28	40,154·7	217,214·3
78	29	34,185·2	177,059·6
79	30	28,814·6	142,874·4
80	31	24,030·9	114,059·8
81	32	19,815·8	90,028·9
82	33	16,144·4	70,213·1
83	34	12,986·1	54,068·7
84	35	10,305·0	41,082·6
85	36	8,060·97	30,777·56
86	37	6,210·65	22,716·59
87	38	4,709·01	16,505·94
88	39	3,510·64	11,796·93
89	40	2,571·10	8,286·29
90	41	1,848·09	5,715·19
91	42	1,302·53	3,867·10
92	43	899·274	2,564·570
93	44	607·572	1,665·296
94	45	401·291	1,057·724
95	46	258·834	656·433
96	47	162·860	397·599
97	48	99·8529	234·7390
98	49	59·5892	134·8861
99	50	34·5728	75·2969
100	51	19·4782	40·7241
101	52	10·6376	21·2459
102	53	5·6268	10·6083
103	54	2·8792	4·9815
104	55	1·4234	2·1023
105	56	·6789	·6789

Difference of Age 58 Years.

Ages x	Ages y	$D_{x, y}$	$N_{x, y}$
58	0	420,603	3,649,293
59	1	331,701	3,228,690
60	2	292,120	2,896,989
61	3	264,650	2,604,869
62	4	242,117	2,340,219
63	5	222,317	2,098,102
64	6	204,449	1,875,785
65	7	187,968	1,671,336
66	8	172,520	1,483,368
67	9	157,993	1,310,848
68	10	144,267	1,152,855
69	11	131,252	1,008,588
70	12	118,891	877,336
71	13	107,149	758,445
72	14	96,010·3	651,295·9
73	15	85,474·5	555,285·6
74	16	75,551·7	469,811·1
75	17	66,259·2	394,259·4
76	18	57,616·7	328,000·2
77	19	49,643·3	270,383·5
78	20	42,354·1	220,740·2
79	21	35,757·6	178,386·1
80	22	29,869·7	142,628·5
81	23	24,671·1	112,758·8
82	24	20,134·4	88,087·7
83	25	16,224·2	67,953·3
84	26	12,898·5	51,729·1
85	27	10,109·4	38,830·6
86	28	7,805·04	28,721·18
87	29	5,930·98	20,916·14
88	30	4,432·09	14,985·16
89	31	3,254·16	10,553·07
90	32	2,345·44	7,298·91
91	33	1,657·90	4,953·47
92	34	1,148·23	3,295·57
93	35	778·400	2,147·337
94	36	515·995	1,368·937
95	37	334·124	852·942
96	38	211·119	518·818
97	39	130·027	307·699
98	40	77·9726	177·6723
99	41	45·4736	99·6997
100	42	25·7621	54·2261
101	43	14·1609	28·4640
102	44	7·5432	14·3031
103	45	3·8891	6·7599
104	46	1·9382	2·8708
105	47	·9326	·9326

JOINT LIVES:—TWO MALES.

Difference of Age 50 Years.

Difference of Age 51 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	**Ages**		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 50 Years.**		x	y	**Difference of Age 51 Years.**	
50	0	570,010	5,953,245	51	0	551,063	5,637,711
51	1	454,150	5,383,235	52	1	438,439	5,086,648
52	2	404,230	4,929,085	53	2	389,847	4,648,209
53	3	370,494	4,524,855	54	3	356,931	4,258,362
54	4	343,307	4,154,361	55	4	330,367	3,901,431
55	5	319,719	3,811,054	56	5	307,295	3,571,064
56	6	298,672	3,491,335	57	6	286,686	3,263,769
57	7	279,424	3,192,663	58	7	267,819	2,977,083
58	8	261,473	2,913,239	59	8	250,210	2,709,264
59	9	244,656	2,651,766	60	9	233,696	2,459,054
60	10	228,779	2,407,110	61	10	218,093	2,225,358
61	11	213,686	2,178,331	62	11	203,250	2,007,265
62	12	199,255	1,964,645	63	12	189,053	1,804,015
63	13	185,391	1,765,390	64	13	175,414	1,614,962
64	14	172,026	1,579,999	65	14	162,269	1,439,548
65	15	159,113	1,407,973	66	15	149,581	1,277,279
66	16	146,624	1,248,860	67	16	137,326	1,127,698
67	17	134,549	1,102,236	68	17	125,500	990,372
68	18	122,892	967,687	69	18	114,111	864,872
69	19	111,666	844,795	70	19	103,178	750,761
70	20	100,896	733,129	71	20	92,727·0	647,583·1
71	21	90,609·8	632,233·3	72	21	82,789·2	554,856·1
72	22	80,883·9	541,623·5	73	22	73,436·6	472,066·9
73	23	71,733·7	460,739·6	74	23	64,684·7	398,630·3
74	24	63,173·7	389,005·9	75	24	56,546·9	333,945·6
75	25	55,216·5	325,832·2	76	25	49,033·3	277,398·7
76	26	47,871·4	270,615·7	77	26	42,149·7	228,365·4
77	27	41,143·8	222,744·3	78	27	35,896·5	186,215·7
78	28	35,033·6	181,600·5	79	28	30,268·4	150,319·2
79	29	29,535·4	146,566·9	80	29	25,253·2	120,050·8
80	30	24,636·9	117,031·5	81	30	20,832·1	94,797·6
81	31	20,319·7	92,394·6	82	31	16,979·8	73,965·5
82	32	16,558·7	72,074·9	83	32	13,664·4	56,985·7
83	33	13,322·5	55,516·2	84	33	10,848·7	43,321·3
84	34	10,574·7	42,193·7	85	34	8,490·75	32,472·60
85	35	8,274·21	31,619·02	86	35	6,545·50	23,981·85
86	36	6,376·82	23,344·81	87	36	4,965·95	17,436·35
87	37	4,836·54	16,967·99	88	37	3,704·65	12,470·40
88	38	3,606·96	12,131·45	89	38	2,715·11	8,765·75
89	39	2,642·61	8,524·49	90	39	1,953·11	6,050·64
90	40	1,900·25	5,881·88	91	40	1,377·69	4,097·53
91	41	1,339·87	3,981·63	92	41	952·006	2,719·842
92	42	925·478	2,641·758	93	42	643·814	1,767·836
93	43	625·585	1,716·280	94	43	425·666	1,124·022
94	44	413·409	1,090·695	95	44	274·858	698·356
95	45	266·802	677·286	96	45	173·147	423·498
96	46	167·976	410·484	97	46	106·294	250·351
97	47	103·056	242·508	98	47	63·5183	144·0572
98	48	61·5438	139·4521	99	48	36·9054	80·5389
99	49	35·7333	77·9083	100	49	20·8242	43·6335
100	50	20·1479	42·1750	101	50	11·3976	22·8093
101	51	11·0187	22·0271	102	51	6·0435	11·4117
102	52	5·8344	11·0084	103	52	3·0989	5·3682
103	53	2·9886	5·1740	104	53	1·5353	2·2693
104	54	1·4791	2·1854	105	54	·7340	·7340
105	55	·7063	·7063				

JOINT LIVES:—Two Males.

Difference of Age 52 Years.

Difference of Age 53 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	Difference of Age 52 Years.		x	y	Difference of Age 53 Years.	
52	0	532,000	5,329,688	53	0	513,070	5,029,511
53	1	422,839	4,797,688	54	1	407,360	4,516,441
54	2	375,576	4,374,849	55	2	361,419	4,109,081
55	3	343,477	3,999,273	56	3	330,130	3,747,662
56	4	317,529	3,655,796	57	4	304,786	3,417,532
57	5	294,963	3,338,267	58	5	282,714	3,112,746
58	6	274,780	3,043,304	59	6	262,943	2,830,032
59	7	256,282	2,768,524	60	7	244,801	2,567,089
60	8	239,001	2,512,242	61	8	227,837	2,322,288
61	9	222,780	2,273,241	62	9	211,900	2,094,451
62	10	207,442	2,050,461	63	10	196,820	1,882,551
63	11	192,844	1,843,019	64	11	182,465	1,685,731
64	12	178,878	1,650,175	65	12	168,733	1,503,266
65	13	165,465	1,471,297	66	13	155,552	1,334,533
66	14	152,548	1,305,832	67	14	142,874	1,178,981
67	15	140,095	1,153,284	68	15	130,672	1,036,107
68	16	128,090	1,013,189	69	16	118,937	905,435
69	17	116,533	885,099	70	17	107,675	786,498
70	18	105,437	768,566	71	18	96,900·5	678,822·6
71	19	94,824·4	663,128·7	72	19	86,640·0	581,922·1
72	20	84,723·7	568,304·3	73	20	76,922·8	495,282·1
73	21	75,166·4	483,580·6	74	21	67,780·1	418,359·3
74	22	66,220·2	408,414·2	75	22	59,273·9	350,579·2
75	23	57,899·4	342,194·0	76	23	51,415·8	291,305·3
76	24	50,214·8	284,294·6	77	24	44,213·0	239,889·5
77	25	43,172·7	234,079·8	78	25	37,666·7	195,676·5
78	26	36,774·2	190,907·1	79	26	31,772·2	158,009·8
79	27	31,013·9	154,132·9	80	27	26,517·4	126,237·6
80	28	25,879·9	123,119·0	81	28	21,883·2	99,720·2
81	29	21,353·2	97,239·1	82	29	17,843·4	77,837·0
82	30	17,408·0	75,885·9	83	30	14,365·3	59,993·6
83	31	14,912·0	58,477·9	84	31	11,410·1	45,628·3
84	32	11,127·1	44,465·9	85	32	8,934·27	34,218·23
85	33	8,710·72	33,338·82	86	33	6,890·82	25,283·96
86	34	6,716·80	24,628·10	87	34	5,230·71	18,393·14
87	35	5,097·31	17,911·30	88	35	3,904·39	13,162·43
88	36	3,803·77	12,813·99	89	36	2,863·26	9,258·04
89	37	2,788·65	9,010·22	90	37	2,061·04	6,394·78
90	38	2,006·69	6,221·57	91	38	1,454·86	4,333·74
91	39	1,416·01	4,214·88	92	39	1,006·10	2,878·88
92	40	978·876	2,798·868	93	40	680·961	1,872·778
93	41	662·269	1,819·992	94	41	450·626	1,191·817
94	42	438·069	1,157·723	95	42	291·254	741·191
95	43	283·007	719·654	96	43	183·663	449·937
96	44	178·375	436·647	97	44	112·874	266·274
97	45	109·566	258·272	98	45	67·5301	153·4003
98	46	65·5135	148·7055	99	46	39·2859	85·8702
99	47	38·0894	83·1920	100	47	22·1973	46·5843
100	48	21·5073	45·1026	101	48	12·1666	24·3870
101	49	11·7802	23·5953	102	49	6·4611	12·2204
102	50	6·2513	11·8151	103	50	3·3203	5·7593
103	51	3·2099	5·5638	104	51	1·6490	2·4390
104	52	1·5920	2·3539	105	52	·7900	·7900
105	53	·7619	·7619				

JOINT LIVES:—Two Males.

Difference of Age 54 Years.

Difference of Age 55 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 54 Years.**		x	y	**Difference of Age 55 Years.**	
54	0	494,288	4,737,284	55	0	475,658	4,453,069
55	1	392,006	4,242,996	56	1	376,773	3,977,411
56	2	347,375	3,850,990	57	2	333,434	3,600,638
57	3	316,882	3,503,615	58	3	303,722	3,267,204
58	4	292,129	3,186,733	59	4	279,544	2,963,482
59	5	270,535	2,894,604	60	5	258,415	2,683,938
60	6	251,164	2,624,069	61	6	239,432	2,425,523
61	7	233,366	2,372,905	62	7	221,969	2,186,091
62	8	216,710	2,139,539	63	8	205,614	1,964,122
63	9	201,051	1,922,829	64	9	190,230	1,758,508
64	10	186,228	1,721,778	65	10	175,666	1,568,278
65	11	172,116	1,535,550	66	11	161,805	1,392,612
66	12	158,625	1,363,434	67	12	148,565	1,230,807
67	13	145,688	1,204,809	68	13	135,889	1,082,242
68	14	133,265	1,059,121	69	14	123,743	946,353
69	15	121,336	925,856	70	15	112,113	822,610
70	16	109,897	804,520	71	16	100,999	710,497
71	17	98,957·0	694,623·0	72	17	90,415·9	609,498·4
72	18	88,536·9	595,666·0	73	18	80,384·9	519,082·5
73	19	78,662·7	507,129·1	74	19	70,932·8	438,697·6
74	20	69,363·9	428,466·4	75	20	62,087·8	367,764·8
75	21	60,670·1	359,102·5	76	21	53,876·3	305,677·0
76	22	52,636·4	298,432·4	77	22	46,345·1	251,800·7
77	23	45,270·5	245,796·0	78	23	39,496·9	205,455·6
78	24	38,574·3	200,525·5	79	24	33,327·5	165,958·7
79	25	32,543·3	161,951·2	80	25	27,825·0	132,631·2
80	26	27,165·7	129,407·9	81	26	22,970·4	104,806·2
81	27	22,422·2	102,242·2	82	27	18,736·7	81,835·8
82	28	18,286·3	79,820·0	83	28	15,090·1	63,099·1
83	29	14,724·6	61,533·7	84	29	11,990·4	48,009·0
84	30	11,697·8	46,809·1	85	30	9,392·53	36,018·63
85	31	9,161·50	35,111·34	86	31	7,247·41	26,626·10
86	32	7,067·66	25,949·84	87	32	5,503·94	19,378·69
87	33	5,366·23	18,882·18	88	33	4,110·37	13,874·75
88	34	4,006·57	13,515·95	89	34	3,015·91	9,764·38
89	35	2,939·00	9,509·38	90	35	2,172·16	6,748·47
90	36	2,116·18	6,570·38	91	36	1,534·24	4,576·31
91	37	1,494·26	4,454·20	92	37	1,061·70	3,042·07
92	38	1,033·71	2,959·94	93	38	719·103	1,980·374
93	39	699·901	1,926·227	94	39	476·232	1,261·271
94	40	463·344	1,226·326	95	40	308·058	785·039
95	41	299·602	762·982	96	41	194·433	476·981
96	42	189·015	463·380	97	42	119·607	282·548
97	43	116·220	274·365	98	43	71·6319	162·9413
98	44	69·5693	158·1448	99	44	41·7179	91·3094
99	45	40·4952	88·5755	100	45	23·5993	49·5915
100	46	22·8945	48·0803	101	46	12·9513	25·9922
101	47	12·5569	25·1858	102	47	6·8871	13·0409
102	48	6·6731	12·6289	103	48	3·5443	6·1538
103	49	3·4318	5·9558	104	49	1·7630	2·6095
104	50	1·7057	2·5240	105	50	·8465	·8465
105	51	·8183	·8183				

JOINT LIVES:—Two Males.

Difference of Age 56 Years.

Difference of Age 57* Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 56 Years.**		x	y	**Difference of Age 57* Years.**	
56	0	457,174	4,176,950	57	0	438,827	3,908,998
57	1	361,652	3,719,776	58	1	346,633	3,470,171
58	2	319,587	3,358,124	59	2	305,820	3,123,538
59	3	290,638	3,038,537	60	3	277,618	2,817,718
60	4	267,021	2,747,899	61	4	254,548	2,540,100
61	5	246,345	2,480,878	62	5	234,314	2,285,552
62	6	227,738	2,234,533	63	6	216,078	2,051,238
63	7	210,604	2,006,795	64	7	199,270	1,835,160
64	8	194,548	1,796,191	65	8	183,514	1,635,890
65	9	179,441	1,601,643	66	9	168,691	1,452,376
66	10	165,142	1,422,202	67	10	154,669	1,283,685
67	11	151,544	1,257,060	68	11	141,352	1,129,016
68	12	138,573	1,105,516	69	12	128,672	987,664
69	13	126,180	966,943	70	13	116,588	858,992
70	14	114,337	840,763	71	14	105,080	742,404
71	15	103,036	726,426	72	15	94,142·6	637,324·0
72	16	92,281·7	623,390·3	73	16	83,784·9	543,181·4
73	17	82,090·9	531,108·6	74	17	74,024·2	459,396·5
74	18	72,485·8	449,017·7	75	18	64,882·2	385,372·3
75	19	63,492·1	376,531·9	76	19	56,382·3	320,490·1
76	20	55,135·2	313,039·8	77	20	48,545·3	264,107·8
77	21	47,436·8	257,904·6	78	21	41,387·0	215,562·5
78	22	40,434·6	210,467·8	79	22	34,934·7	174,175·5
79	23	34,124·6	170,033·2	80	23	29,177·0	139,240·8
80	24	28,495·5	135,908·6	81	24	24,094·8	110,063·8
81	25	23,527·9	107,413·1	82	25	19,660·7	85,969·0
82	26	19,194·8	83,885·2	83	26	15,839·8	66,308·3
83	27	15,461·7	64,690·4	84	27	12,590·7	50,468·5
84	28	12,288·0	49,228·7	85	28	9,866·40	37,877·84
85	29	9,627·46	36,940·65	86	29	7,616·03	28,011·44
86	30	7,430·17	27,313·19	87	30	5,786·25	20,395·41
87	31	5,643·93	19,883·02	88	31	4,323·07	14,609·16
88	32	4,215·85	14,239·09	89	32	3,173·45	10,286·09
89	33	3,094·05	10,023·24	90	33	2,286·76	7,112·64
90	34	2,229·01	6,929·19	91	34	1,616·04	4,825·88
91	35	1,574·82	4,700·18	92	35	1,118·94	3,209·84
92	36	1,090·11	3,125·36	93	36	758·340	2,090·895
93	37	738·579	2,035·253	94	37	502·549	1,332·555
94	38	489·298	1,296·674	95	38	325·314	830·006
95	39	316·627	807·376	96	39	205·482	504·692
96	40	199·921	490·749	97	40	126·508	299·210
97	41	123·035	290·828	98	41	75·8323	172·7024
98	42	73·7192	167·7931	99	42	44·2065	96·8701
99	43	42·9548	94·0739	100	43	25·0327	52·6636
100	44	24·3119	51·1191	101	44	13·7531	27·6309
101	45	13·3500	26·8072	102	45	7·3221	13·8778
102	46	7·1035	13·4572	103	46	3·7729	6·5557
103	47	3·6580	6·3537	104	47	1·8792	2·7828
104	48	1·8208	2·6957	105	48	·9036	·9036
105	49	·8749	·8749				

* **Note.**—The Columns $D_{x,\,y}$ and $N_{x,\,y}$ for **Difference of Age 58 Years** are printed on page 475; and the corresponding Columns for **Difference of Age 59–105 Years** will be found by reading the Tables backwards from p. 474 to p. 428.

JOINT LIVES.

TWO FEMALES.

Interest **3** per Cent.

JOINT LIVES :—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	0		1			2		
Age of (x)	λ $D_{x,\,0}$	λ $N_{x,\,0}$	**Age** of (x)	λ $D_{x,\,1}$	λ $N_{x,\,1}$	**Age** of (x)	λ $D_{x,\,2}$	λ $N_{x,\,2}$
0	6·3772930	7·5050688	0	6·3080348	7·4879848	0	6·2738572	7·4746229
1	6·3080348	7·4879848	1	6·2387766	7·4714397	1	6·2045990	7·4582959
2	6·2738572	7·4746229	2	6·2045990	7·4582959	2	6·1704214	7·4452489
3	6·2517940	7·4625824	3	6·1825358	7·4463697	3	6·1483582	7·4333796
4	6·2347464	7·4511373	4	6·1654882	7·4349945	4	6·1313106	7·4220445
5	6·2205800	7·4400126	5	6·1513218	7·4239143	5	6·1171442	7·4109938
6	6·2083565	7·4290575	6	6·1390983	7·4129859	6	6·1049207	7·4000885
7	6·1973307	7·4181683	7	6·1280725	7·4021120	7	6·0938949	7·3892329
8	6·1869512	7·4072799	8	6·1176930	7·3912314	8	6·0835154	7·3783674
9	6·1771821	7·3963585	9	6·1079239	7·3803105	9	6·0737463	7·3674588
10	6·1678797	7·3853689	10	6·0986215	7·3693153	10	6·0644439	7·3564731
11	6·1589125	7·3742807	11	6·0896543	7·3582169	11	6·0554767	7·3453819
12	6·1501612	7·3630696	12	6·0809030	7·3469917	12	6·0467254	7·3341626
13	6·1415190	7·3517157	13	6·0722608	7·3356205	13	6·0380832	7·3227959
14	6·1328911	7·3402033	14	6·0636329	7·3240892	14	6·0294553	7·3112680
15	6·1241949	7·3285215	15	6·0549367	7·3123866	15	6·0207591	7·2995685
16	6·1153601	7·3166623	16	6·0461019	7·3005063	16	6·0119243	7·2876909
17	6·1063287	7·3046220	17	6·0370705	7·2884450	17	6·0028929	7·2756317
18	6·0970549	7·2923994	18	6·0277967	7·2762021	18	5·9936191	7·2633911
19	6·0875050	7·2799971	19	6·0182468	7·2637794	19	5·9840692	7·2509710
20	6·0776576	7·2674191	20	6·0083994	7·2511821	20	5·9742218	7·2383761
21	6·0675036	7·2546723	21	5·9982454	7·2384160	21	5·9640678	7·2256124
22	6·0572520	7·2417665	22	5·9879938	7·2254897	22	5·9538162	7·2126874
23	6·0469064	7·2286980	23	5·9776482	7·2123988	23	5·9434706	7·1995975
24	6·0364694	7·2154620	24	5·9672112	7·1991390	24	5·9330336	7·1863372
25	6·0259437	7·2020536	25	5·9566855	7·1857050	25	5·9225079	7·1729023
26	6·0153310	7·1884676	26	5·9460728	7·1720916	26	5·9118952	7·1592868
27	6·0046330	7·1746976	27	5·9353748	7·1582925	27	5·9011972	7·1454845
28	5·9938507	7·1607374	28	5·9245925	7·1443004	28	5·8904149	7·1314884
29	5·9829846	7·1465795	29	5·9137264	7·1301091	29	5·8795488	7·1172915
30	5·9720347	7·1322165	30	5·9027765	7·1157097	30	5·8685989	7·1028855
31	5·9610008	7·1176394	31	5·8917426	7·1010941	31	5·8575650	7·0882623
32	5·9498820	7·1028393	32	5·8806238	7·0862526	32	5·8464462	7·0734119
33	5·9386769	7·0878063	33	5·8694187	7·0711755	33	5·8352411	7·0583243
34	5·9273838	7·0725297	34	5·8581256	7·0558517	34	5·8239480	7·0429888
35	5·9160004	7·0569973	35	5·8467422	7·0402692	35	5·8125646	7·0273933
36	5·9045239	7·0411976	36	5·8352657	7·0244155	36	5·8010881	7·0115249
37	5·8929513	7·0251174	37	5·8236931	7·0082773	37	5·7895155	6·9953702
38	5·8812788	7·0087411	38	5·8120206	6·9918397	38	5·7778430	6·9789143
39	5·8695023	6·9920543	39	5·8002441	6·9750869	39	5·7660665	6·9621415
40	5·8576173	6·9750399	40	5·7883591	6·9580019	40	5·7541815	6·9450344
41	5·8456186	6·9576802	41	5·7763604	6·9405665	41	5·7421828	6·9275744
42	5·8335007	6·9399556	42	5·7642425	6·9227609	42	5·7300649	6·9097418
43	5·8212576	6·9218453	43	5·7519994	6·9045637	43	5·7178218	6·8915148
44	5·8088829	6·9033266	44	5·7396247	6·8859514	44	5·7054471	6·8728701
45	5·7963695	6·8843752	45	5·7271113	6·8668992	45	5·6929337	6·8537821
46	5·7837102	6·8649641	46	5·7144520	6·8473799	46	5·6802744	6·8342230
47	5·7708970	6·8450643	47	5·7016388	6·8273634	47	5·6674612	6·8141631
48	5·7579216	6·8246434	48	5·6886634	6·8068170	48	5·6544858	6·7935688
49	5·7447751	6·8036666	49	5·6755169	6·7857042	49	5·6413393	6·7724040
50	5·7314484	6·7820949	50	5·6621902	6·7639857	50	5·6280126	6·7506276
51	5·7179316	6·7598846	51	5·6486734	6·7416168	51	5·6144958	6·7281958
52	5·7042145	6·7369872	52	5·6349563	6·7185479	52	5·6007787	6·7050580
53	5·6902864	6·7133473	53	5·6210282	6·6947230	53	5·5868506	6·6811580
54	5·6761363	6·6888997	54	5·6068781	6·6700782	54	5·5727005	6·6564323

JOINT LIVES :—TWO FEMALES.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	0		1			2		
Age of (x)	λ $D_{x,0}$	λ $N_{x,0}$	Age of (x)	λ $D_{x,1}$	λ $N_{x,1}$	Age of (x)	λ $D_{x,2}$	λ $N_{x,2}$
55	5·6610892	6·6635652	55	5·5918310	6·6445376	55	5·5576534	6·6308072
56	5·6454625	6·6373279	56	5·5762043	6·6180820	56	5·5420267	6·6042603
57	5·6292303	6·6101346	57	5·5599721	6·5906570	57	5·5257945	6·5767378
58	5·6123556	6·5819266	58	5·5430974	6·5622027	58	5·5089198	6·5481789
59	5·5947907	6·5526390	59	5·5255325	6·5326526	59	5·4913549	6·5185169
60	5·5764768	6·5221999	60	5·5072186	6·5019352	60	5·4730410	6·4876791
61	5·5573440	6·4905319	61	5·4880858	6·4699705	61	5·4539082	6·4555866
62	5·5373119	6·4575506	62	5·4680537	6·4366744	62	5·4335701	6·4221529
63	5·5162888	6·4231646	63	5·4470306	6·4019541	63	5·4128530	6·3872862
64	5·4941721	6·3872750	64	5·4249139	6·3657107	64	5·3907363	6·3508867
65	5·4708485	6·3497765	65	5·4015903	6·3278373	65	5·3674127	6·3128478
66	5·4461934	6·3105559	66	5·3769352	6·2882204	66	5·3427576	6·2730551
67	5·4200715	6·2694915	67	5·3508133	6·2467383	67	5·3166357	6·2313868
68	5·3923366	6·2264542	68	5·3230784	6·2032609	68	5·2889008	6·1877131
69	5·3628313	6·1813070	69	5·2935731	6·1576502	69	5·2593955	6·1418954
70	5·3313876	6·1339022	70	5·2621294	6·1097600	70	5·2279518	6·0937876
71	5·2978263	6·0840853	71	5·2285681	6·0594339	71	5·1943905	6·0432338
72	5·2619573	6·0316920	72	5·1926991	6·0065075	72	5·1585215	5·9900692
73	5·2235797	5·9765471	73	5·1543215	5·9508077	73	5·1201439	5·9341195
74	5·1824816	5·9184660	74	5·1132234	5·8921492	74	5·0790458	5·8752025
75	5·1384400	5·8572553	75	5·0691818	5·8303371	75	5·0350042	5·8131224
76	5·0912211	5·7927103	76	5·0219629	5·7651685	76	4·9877853	5·7476751
77	5·0405803	5·7246150	77	4·9713221	5·6964279	77	4·9371145	5·6786473
78	4·9862617	5·6527436	78	4·9170035	5 6238896	78	4·8828259	5·6058132
79	4·9279988	5·5768588	79	4·8587406	5·5473172	79	4·8245630	5·5289363
80	4·8655140	5·4967119	80	4·7962558	5·4664626	80	4·7620782	5·4477695
81	4·7985188	5·4120428	81	4·7292606	5·3810670	81	4·6950830	5·3620540
82	4·7267137	5·3225798	82	4·6574555	5·2908592	82	4·6232779	5·2715200
83	4·6497884	5·2280396	83	4·5805302	5·1955568	83	4·5463526	5·1758850
84	4·5674214	5·1281268	84	4·4981632	5·0948654	84	4·4639856	5·0748556
85	4·4792807	5·0225332	85	4·4100225	4·9884791	85	4·3758449	4·9681260
86	4·3850228	4·9109407	86	4·3157646	4·8760786	86	4·2815870	4·8553786
87	4·2842937	4·7930161	87	4·2150355	4·7573345	87	4·1808579	4·7362825
88	4·1767283	4·6684158	88	4·1074701	4·6319032	88	4·0732925	4·6104973
89	4·0619505	4·5367831	89	3·9926923	4·4994286	89	3·9585147	4·4771658
90	3·9395734	4·3977466	90	3·8703152	4·3595425	90	3·8361376	4·3374205
91	3·8091991	4·2509243	91	3·7399409	4·2118622	91	3·7057633	4·1895800
92	3·6704187	4·0959176	92	3·6011605	4·0559908	92	3·5669829	4·0331474
93	3·5228125	3·9323134	93	3·4535543	3·8915158	93	3·4193767	3·8683099
94	3·3659496	3·7596800	94	3·2966914	3·7180049	94	3·2625138	3·6944359
95	3·1993884	3·5775584	95	3·1301302	3·5350015	95	3·0959526	3·5110675
96	3·0226764	3·3854633	96	2·9534182	3·3420123	96	2·9192406	3·3177118
97	2·8353499	3·1828550	97	2·7660917	3·1384935	97	2·7319141	3·1138194
98	2·6369346	2·9691036	98	2·5676764	2·9238039	98	2·5334988	2·8987449
99	2·4269448	2·7434227	99	2·3576866	2·6971282	99	2·3235090	2·6716615
100	2·2048843	2·5047087	100	2·1356261	2·4573095	100	2·1014485	2·4313862
101	1·9702458	2·2511908	101	1·9009876	2·2024696	101	1·8668100	2·1759960
102	1·7225110	1·9795925	102	1·6532528	1·9291015	102	1·6190752	1·9018908
103	1·4611507	1·6828947	103	1·3918925	1·6296603	103	1·3577149	1·6013395
104	1·1856249	1·3430874	104	1·1163667	1·2847984	104	1·0821891	1·2545553
105	0·8953823		105	0·8261241		105	0·7919465	
106	0·5898611		106	0·5206029		106	0·4864253	
107	0·2684882		107	0·1992300		107	0·1650524	
108	9·9306798		108	9·8614216		108	9·8272140	
109	9·5758110		109	9·5065828		109	9·4724052	

JOINT LIVES :—Two Females.

Logarithms of the Series $D_{x, y}$ and $N_{x, y}$.

Age of (y)	3			4			5	
Age of (x)	λ $D_{x, 3}$	λ $N_{x, 3}$	Age of (x)	λ $D_{x, 4}$	λ $N_{x, 4}$	Age of x	λ $D_{x, 5}$	λ $N_{x, 5}$
0	6·2517940	7·4625824	0	6·2347464	7·4511373	0	6·2205800	7·4400126
1	6·1825358	7·4463697	1	6·1654882	7·4349945	1	6·1513218	7·4239143
2	6·1483582	7·4333796	2	6·1313106	7·4220445	2	6·1171442	7·4109938
3	6·1262950	7·4215487	3	6·1092474	7·4102440	3	6·0950810	7·3992193
4	6·1092474	7·4102440	4	6·0921998	7·3989659	4	6·0780334	7·3879657
5	6·0950810	7·3992193	5	6·0780334	7·3879657	5	6·0638670	7·3769896
6	6·0828575	7·3883362	6	6·0658099	7·3771058	6	6·0516435	7·3661530
7	6·0718317	7·3775013	7	6·0547841	7·3662928	7	6·0406177	7·3553632
8	6·0614522	7·3666547	8	6·0444046	7·3554677	8	6·0302382	7·3445609
9	6·0516831	7·3557634	9	6·0346355	7·3445970	9	6·0204691	7·3337130
10	6·0423807	7·3447940	10	6·0253331	7·3336470	10	6·0111667	7·3227856
11	6·0334135	7·3337176	11	6·0163659	7·3225901	11	6·0021995	7·3117508
12	6·0246622	7·3225123	12	6·0076146	7·3114032	12	5·9934482	7·3005855
13	6·0160200	7·3111588	13	5·9989724	7·3000679	13	5·9848060	7·2892713
14	6·0073921	7·2996435	14	5·9903145	7·2885702	14	5·9761781	7·2777948
15	5·9986959	7·2879562	15	5·9816483	7·2769000	15	5·9674819	7·2661456
16	5·9898611	7·2760906	16	5·9728135	7·2650514	16	5·9586471	7·2543175
17	5·9808297	7·2640431	17	5·9637821	7·2530209	17	5·9496157	7·2423074
18	5·9715559	7·2518141	18	5·9545083	7·2408085	18	5·9403419	7·2301149
19	5·9620060	7·2394056	19	5·9449584	7·2284163	19	5·9307920	7·2177429
20	5·9521586	7·2268220	20	5·9351110	7·2158490	20	5·9209446	7·2051952
21	5·9420046	7·2140694	21	5·9249570	7·2031126	21	5·9107906	7·1924779
22	5·9317530	7·2011550	22	5·9147054	7·1902134	22	5·9005390	7·1795980
23	5·9214074	7·1880748	23	5·9043598	7·1771485	23	5·8901934	7·1665515
24	5·9109704	7·1748242	24	5·8939228	7·1639121	24	5·8797564	7·1533334
25	5·9004447	7·1613977	25	5·8833971	7·1505000	25	5·8692307	7·1399389
26	5·8898320	7·1477900	26	5·8727844	7·1369060	26	5·8586180	7·1263623
27	5·8791340	7·1339950	27	5·8620864	7·1231239	27	5·8479200	7·1125974
28	5·8683517	7·1200061	28	5·8513041	7·1091474	28	5·8371377	7·0986372
29	5·8574856	7·1058149	29	5·8404380	7·0949684	29	5·8262716	7·0844744
30	5·8465357	7·0914144	30	5·8294881	7·0805796	30	5·8153217	7·0701011
31	5·8355018	7·0767955	31	5·8184542	7·0659717	31	5·8042878	7·0555087
32	5·8243830	7·0619491	32	5·8073354	7·0511355	32	5·7931690	7·0406874
33	5·8131779	7·0468645	33	5·7961303	7·0360609	33	5·7819639	7·0256274
34	5·8018848	7·0315308	34	5·7848372	7·0207370	34	5·7706708	7·0103179
35	5·7905014	7·0159366	35	5·7734538	7·0051518	35	5·7592874	6·9947460
36	5·7790249	7·0000691	36	5·7619773	6·9892925	36	5·7478109	6·9789009
37	5·7674523	6·9839141	37	5·7504047	6·9731456	37	5·7362383	6·9627671
38	5·7557798	6·9674570	38	5·7387322	6·9566958	38	5·7245658	6·9463303
39	5·7440033	6·9506816	39	5·7269557	6·9399275	39	5·7127893	6·9295745
40	5·7321183	6·9335712	40	5·7150707	6·9228228	40	5·7009043	6·9124825
41	5·7201196	6·9161066	41	5·7030720	6·9053641	41	5·6889056	6·8950353
42	5·7080017	6·8982679	42	5·6909541	6·8875302	42	5·6767877	6·8772131
43	5·6957586	6·8800335	43	5·6787110	6·8692997	43	5·6645446	6·8589939
44	5·6833839	6·8613798	44	5·6663363	6·8506490	44	5·6521699	6·8403537
45	5·6708705	6·8422810	45	5·6538229	6·8315523	45	5·6396565	6·8212671
46	5·6582112	6·8227093	46	5·6411636	6·8119814	46	5·6269972	6·8017058
47	5·6453980	6·8026340	47	5·6283504	6·7919060	47	5·6141840	6·7816392
48	5·6324226	6·7820224	48	5·6153750	6·7712921	48	5·6012086	6·7610334
49	5·6192761	6·7608375	49	5·6022285	6·7501038	49	5·5880621	6·7398515
50	5·6059494	6·7390387	50	5·5889018	6·7282995	50	5·5747354	6·7180531
51	5·5924326	6·7165803	51	5·5753850	6·7058346	51	5·5612186	6·6955927
52	5·5787155	6·6934133	52	5·5616679	6·6826579	52	5·5475015	6·6724200
53	5·5647874	6·6694807	53	5·5477398	6·6587141	53	5·5335734	6·6484779
54	5·5506373	6·6447188	54	5·5335897	6·6339388	54	5·5194233	6·6237036

JOINT LIVES:—Two Females.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	3		4			5		
Age of (x)	$\lambda D_{x,3}$	$\lambda N_{x,3}$	Age of (x)	$\lambda D_{x\ 4}$	$\lambda N_{x,4}$	Age of (x)	$\lambda D_{x,5}$	$\lambda N_{x,5}$
55	5·5355902	6·6190550	55	5·5185426	6·6082598	55	5·5043762	6·5980243
56	5·5199635	6·5924665	56	5·5029159	6·5816538	56	5·4887495	6·5714165
57	5·5037313	6·5648976	57	5·4860837	6·5540657	57	5·4725173	6·5438249
58	5·4868566	6·5362887	58	5·4698090	6·5254337	58	5·4556426	6·5151883
59	5·4692917	6·5065723	59	5·4522441	6·4956918	59	5·4380777	6·4854389
60	5·4509778	6·4756753	60	5·4339302	6·4647662	60	5·4197638	6·4545042
61	5·4318450	6·4435180	61	5·4147974	6·4325771	61	5·4006310	6·4223037
62	5·4118129	6·4100152	62	5·3947653	6·3990385	62	5·3805989	6·3887509
63	5·3907898	6·3750732	63	5·3737422	6·3640576	63	5·3595758	6·3537532
64	5·3686731	6·3385927	64	5·3516255	6 3275336	64	5·3374591	6·3172104
65	5·3453195	6·3004670	65	5·3283019	6·2893606	65	5·3141355	6·2790148
66	5·3206944	6·2605817	66	5·3036468	6·2494237	66	5·2894804	6·2390526
67	5·2945725	6·2188142	67	5·2775249	6·2076009	67	5·2633585	6·1972012
68	5·2668376	6·1750355	68	5·2497900	6·1637617	68	5·2356236	6·1533310
69	5·2373323	6·1291064	69	5·2202847	6·1177683	69	5·2061183	6·1073022
70	5·2058886	6·0808807	70	5·1888110	6·0694735	70	5·1746746	6·0589694
71	5·1723273	6·0302029	71	5·1552797	6·0187221	71	5·1411133	6·0081763
72	5·1364583	5·9769082	72	5·1194107	5·9653494	72	5·1052143	5·9547590
73	5·0980807	5·9208222	73	5·0810331	5·9091820	73	5·0668667	5·8985426
74	5·0569826	5·8617620	74	5·0399350	5·8500351	74	5·0257686	5·8393448
75	5·0129110	5·7995342	75	4·9958934	5·7877165	75	4·9817270	5·7769713
76	4·9657221	5·7339342	76	4·9486745	5·7220218	76	4·9345081	5·7112186
77	4·9150813	5·6647477	77	4·8980337	5·6527375	77	4·8838673	5·6418774
78	4·8607627	5·5917501	78	4·8437151	5·5796381	78	4·8295187	5·5687109
79	4·8024998	5·5147055	79	4·7854522	5·5024887	79	4·7712858	5·4914952
80	4·7400150	5·4333665	80	4·7229674	5·4210422	80	4·7088010	5·4099802
81	4·6730198	5·3474754	81	4·6559722	5·3350404	81	4·6418058	5·3239081
82	4·6012147	5·2567617	82	4·5841671	5·2442143	82	4·5700007	5·2330091
83	4·5242894	5·1609449	83	4·5072418	5·1482820	83	4·4930754	5·1370029
84	4·4419224	5·0597308	84	4·4248748	5·0469515	84	4·4107084	5·0355962
85	4·3537817	4·9528143	85	4·3367341	4·9399169	85	4·3225677	4·9284849
86	4·2595238	4·8398782	86	4·2424762	4·8268617	86	4·2283098	4·8153519
87	4·1587947	4·7205925	87	4·1417471	4·7074561	87	4·1275807	4·6958677
88	4·0512293	4·5946157	88	4·0341817	4·5813590	88	4·0200153	4·5696911
89	3·9364515	4·4615931	89	3·9194039	4·4482148	89	3·9052375	4·4364678
90	3·8140744	4·3211565	90	3·7970268	4·3076574	90	3·7828604	4·2958305
91	3·6837001	4·1729242	91	3·6666525	4·1593045	91	3·6524861	4·1473983
92	3·5449197	4·0165002	92	3·5278721	4·0027603	92	3·5137057	3·9907752
93	3·3973135	3·8514724	93	3·3802659	3·8376118	93	3·3660995	3·8255481
94	3·2404506	3·6774071	94	3·2234030	3·6634276	94	3·2092366	3·6512848
95	3·0738894	3·4938497	95	3·0568418	3·4797494	95	3·0426754	3·4675282
96	2·8971774	3·3003018	96	2·8801298	3·2860831	96	2·8659634	3·2737828
97	2·7098509	3·0962167	97	2·6928033	3·0818752	97	2·6786369	3·0694957
98	2·5114356	2·8809422	98	2·4943880	2·8664770	98	2·4802216	2·8540126
99	2·3014458	2·6536476	99	2·2843982	2·6390480	99	2·2702318	2·6264974
100	2·0793853	2·4131371	100	2·0623377	2·3983897	100	2·0481713	2·3857385
101	1·8447168	2·1574610	101	1·8276992	2·1425353	101	1·8135328	2·1297666
102	1·5970120	1·8829717	102	1·5799644	1·8678091	102	1·5657980	1·8548858
103	1·3356517	1·5818484	103	1·3186041	1·5663290	103	1·3044377	1·5531813
104	1·0601259	1·2341426	104	1·0430783	1·2180468	104	1·0289119	1·2045242
105	0·7698833		105	0·7528357		105	0·7386693	
106	0·4643621		106	0·4473145		106	0·4331481	
107	0·1429892		107	0·1259416		107	0·1117752	
108	9·8051808		108	9·7881332		108	9·7739668	
109	9·4503120		109	9·4332944		109	9·4191280	

JOINT LIVES :—TWO FEMALES.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	6			7			8	
Age of (x)	λ $D_{x,6}$	λ $N_{x,6}$	Age of (x)	λ $D_{x,7}$	λ $N_{x,7}$	Age of (x)	λ $D_{x,8}$	λ $N_{x,8}$
0	6·2083565	7·4290575	0	6·1973307	7·4181683	0	6·1869512	7·4072799
1	6·1390983	7·4129859	1	6·1280725	7·4021120	1	6·1176930	7·3912314
2	6·1049207	7·4000885	2	6·0938949	7·3892329	2	6·0835154	7·3783674
3	6·0828575	7·3883362	3	6·0718317	7·3775013	3	6·0614522	7·3666547
4	6·0658099	7·3771058	4	6·0547841	7·3662928	4	6·0444046	7·3554677
5	6·0516435	7·3661530	5	6·0406177	7·3553632	5	6·0302382	7·3445609
6	6·0394200	7·3553402	6	6·0283942	7·3445746	6	6·0180147	7·3337968
7	6·0283942	7·3445746	7	6·0173684	7·3338336	7	6·0069889	7·3230810
8	6·0180147	7·3337968	8	6·0069889	7·3230810	8	5·9966094	7·3123547
9	6·0082456	7·3229731	9	5·9972198	7·3122830	9	5·9868403	7·3015832
10	5·9989432	7·3120700	10	5·9879174	7·3014057	10	5·9775379	7·2907330
11	5·9899760	7·3010593	11	5·9789502	7·2904211	11	5·9685707	7·2797753
12	5·9812247	7·2899181	12	5·9701989	7·2793057	12	5·9598194	7·2686872
13	5·9725825	7·2786281	13	5·9615567	7·2680413	13	5·9511772	7·2574504
14	5·9639546	7·2671750	14	5·9529288	7·2566141	14	5·9425493	7·2460500
15	5·9552584	7·2555491	15	5·9442326	7·2450137	15	5·9338531	7·2344771
16	5·9464236	7·2437445	16	5·9353978	7·2332340	16	5·9250183	7·2227243
17	5·9373922	7·2317573	17	5·9263664	7·2212718	17	5·9159869	7·2107887
18	5·9281184	7·2195876	18	5·9170926	7·2091272	18	5·9067131	7·1986709
19	5·9185685	7·2072379	19	5·9075427	7·1968022	19	5·8971632	7·1863720
20	5·9087211	7·1947128	20	5·8976953	7·1843013	20	5·8873158	7·1738971
21	5·8985671	7·1820173	21	5·8875413	7·1716302	21	5·8771618	7·1612521
22	5·8883155	7·1691594	22	5·8772897	7·1587956	22	5·8669102	7·1484434
23	5·8779699	7·1561340	23	5·8669441	7·1457941	23	5·8565646	7·1354669
24	5·8675329	7·1429370	24	5·8565071	7·1326202	24	5·8461276	7·1223182
25	5·8570072	7·1295629	25	5·8459814	7·1192688	25	5·8356019	7·1089920
26	5·8463945	7·1160067	26	5·8353687	7·1057350	26	5·8249892	7·0954821
27	5·8356965	7·1022614	27	5·8246707	7·0920119	27	5·8142912	7·0817832
28	5·8249142	7·0883204	28	5·8138884	7·0780931	28	5·8035089	7·0678881
29	5·8140481	7·0741769	29	5·8030223	7·0639707	29	5·7926428	7·0537893
30	5·8030982	7·0598227	30	5·7920724	7·0496374	30	5·7816929	7·0394788
31	5·7920643	7·0452486	31	5·7810385	7·0350841	31	5·7706590	7·0249485
32	5·7809455	7·0304456	32	5·7699197	7·0203020	32	5·7595402	7·0101884
33	5·7697404	7·0154034	33	5·7587146	7·0052801	33	5·7483351	6·9951888
34	5·7584473	7·0001112	34	5·7474215	6·9900078	34	5·7370420	6·9799388
35	5·7470639	6·9845573	35	5·7360381	6·9744737	35	5·7256586	6·9644262
36	5·7355874	6·9687288	36	5·7245616	6·9586649	36	5·7141821	6·9486392
37	5·7240148	6·9526119	37	5·7129890	6·9425677	37	5·7026095	6·9325634
38	5·7123423	6·9361919	38	5·7013165	6·9261671	38	5·6909370	6·9161842
39	5·7005658	6·9194528	39	5·6895400	6·9094471	39	5·6791605	6·8994857
40	5·6886808	6·9023771	40	5·6776550	6·8923909	40	5·6672755	6·8824507
41	5·6766821	6·8849465	41	5·6656563	6·8749794	41	5·6552768	6·8650607
42	5·6645642	6·8671403	42	5·6535384	6·8571926	42	5·6431589	6·8472954
43	5·6523211	6·8489371	43	5·6412953	6·8390084	43	5·6309158	6·8291329
44	5·6399464	6·8303127	44	5·6289206	6·8204034	44	5·6185411	6·8105492
45	5·6274330	6·8112415	45	5·6164072	6·8013515	45	5·6060277	6·7915189
46	5·6147737	6·7916955	46	5·6037479	6·7818244	46	5·5933684	6·7720137
47	5·6019605	6·7716436	47	5·5909347	6·7617915	47	5·5805552	6·7520025
48	5·5889851	6·7510524	48	5·5779593	6·7412191	48	5·5675798	6·7314520
49	5·5758386	6·7298846	49	5·5648128	6·7200700	49	5·5544333	6·7103247
50	5·5625119	6·7080993	50	5·5514861	6·6983030	50	5·5411066	6·6885796
51	5·5489951	6·6856515	51	5·5379693	6·6758730	51	5·5275898	6·6661713
52	5·5352780	6·6624906	52	5·5242522	6·6527296	52	5·5138727	6·6430492
53	5·5213499	6·6385601	53	5·5103241	6·6288162	53	5·4999446	6·6191570
54	5·5071998	6·6137958	54	5·4961740	6·6040692	54	5·4857945	6·5944310

JOINT LIVES:—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	6			7			8	
Age of (x)	$\lambda\ D_{x,\,6}$	$\lambda\ N_{x,\,6}$	Age of (r)	$\lambda\ D_{x,\,7}$	$\lambda\ N_{x,\,7}$	Age of (x)	$\lambda\ D_{x,\,8}$	$\lambda\ N_{x,\,8}$
55	5·1921527	6·5881265	55	5·4811269	6·5784157	55	5·4707174	6·5687992
56	5·4765260	6·5615273	56	5·4655002	6·5518328	56	5·4551207	6·5422365
57	5·4602938	6·5339434	57	5·4492680	6·5242641	57	5·4388885	6·5146885
58	5·4434191	6·5053135	58	5·4323933	6·4956485	58	5·4220138	6·4860930
59	5·4258542	6·4755699	59	5·4148284	6·4659187	59	5·4044489	6·4563827
60	5·4075403	6·4446386	60	5·3965145	6·4350009	60	5·3861350	6·4254840
61	5·3884075	6·4124405	61	5·3773817	6·4028141	61	5·3670022	6·3933165
62	5·3683754	6·3788888	62	5·3573196	6·3692732	62	5·3469701	6·3597929
63	5·3473523	6·3438899	63	5·3363265	6·3342839	63	5·3259470	6·3248206
64	5·3252356	6·3073439	64	5·3142098	6·2977461	64	5·3038303	6·2882989
65	5·3019120	6·2691436	65	5·2908862	6·2595521	65	5·2805067	6·2501200
66	5·2772569	6·2291738	66	5·2662311	6·2195876	66	5·2558516	6·2101691
67	5·2511350	6·1873129	67	5·2401092	6·1777298	67	5·2297297	6·1683242
68	5·2234001	6·1434298	68	5·2123743	6·1338485	68	5·2019948	6·1244540
69	5·1938948	6·0973875	69	5·1828690	6·0878048	69	5·1724895	6·0784206
70	5·1624511	6·0490373	70	5·1514253	6·0394530	70	5·1410458	6·0300760
71	5·1288898	5·9982245	71	5·1178640	5·9886357	71	5·1074845	5·9792060
72	5·0930208	5·9447846	72	5·0819950	5·9351887	72	5·0716155	5·9258240
73	5·0546432	5·8885439	73	5·0436174	5·8789387	73	5·0332379	5·8695766
74	5·0135451	5·8293179	74	5·0025193	5·8197025	74	4·9921398	5·8103411
75	4·9695035	5·7669142	75	4·9584777	5·7572852	75	4·9480982	5·7479233
76	4·9222846	5·7011293	76	4·9112588	5·6914845	76	4·9008793	5·6821199
77	4·8716438	5·6317487	77	4·8606180	5·6220866	77	4·8502385	5·6127170
78	4·8173252	5·5585485	78	4·8062994	5·5488664	78	4·7959199	5·5394905
79	4·7590623	5·4812934	79	4·7480365	5·4715893	79	4·7376570	5·4622047
80	4·6965775	5·3997365	80	4·6855517	5·3900090	80	4·6751722	5·3806135
81	4·6295823	5·3136209	81	4·6185565	5·3038675	81	4·6081770	5·2944600
82	4·5577772	5·2226767	82	4·5467514	5·2128966	82	4·5363719	5·2034746
83	4·4808519	5·1266232	83	4·4698261	5·1168142	83	4·4594166	5·1073776
84	4·3984849	5·0251686	84	4·3874591	5·0153291	84	4·3770796	5·0058748
85	4·3103442	4·9180078	85	4·2993184	4·9081369	85	4·2889389	4·8986638
86	4·2160863	4·8048241	86	4·2050605	4·7949207	86	4·1946810	4·7854281
87	4·1153572	4·6852893	87	4·1043314	4·6753521	87	4·0939519	4·6658380
88	4·0077918	4·5590611	88	3·9967660	4·5490901	88	3·9863865	4·5395537
89	3·8930140	4·4257859	89	3·8819882	4·4157802	89	3·8716087	4·4062211
90	3·7706369	4·2850965	90	3·7596111	4·2750557	90	3·7492316	4·2654728
91	3·6402626	4·1366118	91	3·6292368	4·1265356	91	3·6188573	4·1169284
92	3·5014822	3·9799366	92	3·4904564	3·9698244	92	3·4800769	3·9601924
93	3·3538760	3·8146577	93	3·3428502	3·8045102	93	3·3324707	3·7948525
94	3·1970131	3·6403433	94	3·1859873	3·6301603	94	3·1756078	3·6204765
95	3·0304519	3·4565345	95	3·0194261	3·4463166	95	3·0090466	3·4366078
96	2·8537399	3·2627372	96	2·8427141	3·2524828	96	2·8323346	3·2427479
97	2·6664134	3·0583976	97	2·6553876	3·0481068	97	2·6450081	3·0383447
98	2·4679981	2·8428613	98	2·4569723	2·8325326	98	2·4465928	2·8227426
99	2·2580083	2·6152850	99	2·2469825	2·6049169	99	2·2366030	2·5950959
100	2·0359478	2·3744643	100	2·0249220	2·3640461	100	2·0145125	2·3541911
101	1·8013093	2·1184102	101	1·7902835	2·1079386	101	1·7799040	2·0980387
102	1·5535745	1·8434259	102	1·5425187	1·8328779	102	1·5321692	1·8229203
103	1·2922142	1·5415755	103	1·2811884	1·5309216	103	1·2708089	1·5208764
104	1·0166884	1·1926984	104	1·0056626	1·1818893	104	0·9952831	1·1717148
105	0·7264458		105	0·7154200		105	0·7050405	
106	0·4209246		106	0·4098988		106	0·3995193	
107	0·0995517		107	0·0885259		107	0·0781464	
108	9·7617433		108	9·7507175		108	9·7403380	
109	9·4069045		109	9·3958787		109	9·3854992	

JOINT LIVES:—TWO FEMALES.

Logarithms of the Series $D_{x, y}$ and $N_{x, y}$.

Age of (y)	9			10			11	
Age of (x)	λ $D_{x, 9}$	λ $N_{x, 9}$	Age of (x)	λ $D_{x, 10}$	λ $N_{x, 10}$	Age of (x)	λ $D_{x, 11}$	λ $N_{x, 11}$
0	6·1771821	7·3963585	0	6·1678797	7·3853689	0	6·1589125	7·3742807
1	6·1079239	7·3803105	1	6·0986215	7·3693153	1	6·0896543	7·3582169
2	6·0737463	7·3674588	2	6·0644439	7·3564731	2	6·0554767	7·3453819
3	6·0516831	7·3557634	3	6·0423807	7·3447940	3	6·0334135	7·3337176
4	6·0316355	7·3445970	4	6·0253331	7·3336470	4	6·0163659	7·3225901
5	6·0204691	7·3337130	5	6·0111667	7·3227856	5	6·0021995	7·3117508
6	6·0082156	7·3229731	6	5·9989132	7·3120700	6	5·9899760	7·3010593
7	5·9972198	7·3122830	7	5·9879174	7·3014057	7	5·9789502	7·2904211
8	5·9868103	7·3015832	8	5·9775379	7·2907330	8	5·9685707	7·2797753
9	5·9770712	7·2908389	9	5·9677688	7·2800167	9	5·9588016	7·2690874
10	5·9677688	7·2800167	10	5·9584664	7·2692229	10	5·9494992	7·2583225
11	5·9588016	7·2690874	11	5·9494992	7·2583225	11	5·9405320	7·2474523
12	5·9500503	7·2580278	12	5·9407479	7·2472926	12	5·9317807	7·2364526
13	5·9414081	7·2468195	13	5·9321057	7·2361141	13	5·9231385	7·2253046
14	5·9327802	7·2354481	14	5·9234778	7·2247726	14	5·9145106	7·2139938
15	5·9240840	7·2239033	15	5·9147816	7·2132577	15	5·9058144	7·2025101
16	5·9152492	7·2121794	16	5·9059168	7·2015632	16	5·8969796	7·1908463
17	5·9062178	7·2002722	17	5·8969154	7·1896860	17	5·8879482	7·1789999
18	5·8969140	7·1881821	18	5·8876416	7·1776254	18	5·8786744	7·1669704
19	5·8873541	7·1759114	19	5·8780917	7·1653841	19	5·8691245	7·1547598
20	5·8775467	7·1634647	20	5·8682143	7·1529666	20	5·8592771	7·1423726
21	5·8673927	7·1508469	21	5·8580903	7·1403779	21	5·8491231	7·1298146
22	5·8571411	7·1380657	22	5·8478387	7·1276256	22	5·8388715	7·1170922
23	5·8467955	7·1251164	23	5·8374931	7·1147046	23	5·8285259	7·1042019
24	5·8363585	7·1119943	24	5·8270561	7·1016113	24	5·8180889	7·0911382
25	5·8258328	7·0986942	25	5·8165304	7·0883393	25	5·8075632	7·0778957
26	5·8152201	7·0852110	26	5·8059177	7·0748837	26	5·7969505	7·0644692
27	5·8045221	7·0715374	27	5·7952197	7·0612375	27	5·7862525	7·0508521
28	5·7937398	7·0576676	28	5·7844374	7·0473948	28	5·7754702	7·0370379
29	5·7828737	7·0435941	29	5·7735713	7·0333481	29	5·7646041	7·0230190
30	5·7719238	7·0293087	30	5·7626214	7·0190889	30	5·7536542	7·0087878
31	5·7608899	7·0148026	31	5·7515875	7·0046090	31	5·7426203	6·9943354
32	5·7497711	7·0000669	32	5·7404687	6·9898988	32	5·7315015	6·9796526
33	5·7385660	6·9850913	33	5·7292636	6·9749486	33	5·7202964	6·9647291
34	5·7272729	6·9698650	34	5·7179705	6·9597475	34	5·7090033	6·9495545
35	5·7158895	6·9543760	35	5·7065871	6·9442838	35	5·6976199	6·9341169
36	5·7044130	6·9386120	36	5·6951106	6·9285445	36	5·6861434	6·9184038
37	5·6928104	6·9225596	37	5·6835380	6·9125163	37	5·6745708	6·9024015
38	5·6811679	6·9062034	38	5·6718655	6·8961850	38	5·6628983	6·8860953
39	5·6693914	6·8895281	39	5·6600890	6·8795339	39	5·6511218	6·8694700
40	5·6575064	6·8725162	40	5·6482040	6·8625465	40	5·6392368	6·8525079
41	5·6455077	6·8551491	41	5·6362053	6·8452038	41	5·6272381	6·8351908
42	5·6333898	6·8374070	42	5·6240874	6·8274861	42	5·6151202	6·8174985
43	5·6211467	6·8192678	43	5·6118443	6·8093714	43	5·6028771	6·7994092
44	5·6087720	6·8007077	44	5·5994696	6·7908361	44	5·5905024	6·7808996
45	5·5962586	6·7817003	45	5·5869562	6·7718544	45	5·5779890	6·7619439
46	5·5835993	6·7622195	46	5·5742969	6·7523979	46	5·5653297	6·7425135
47	5·5707861	6·7422324	47	5·5614837	6·7324363	47	5·5525165	6·7225779
48	5·5578107	6·7217057	48	5·5485083	6·7119355	48	5·5395111	6·7021037
49	5·5446642	6·7006026	49	5·5353618	6·6908581	49	5·5263946	6·6810534
50	5·5313375	6·6788820	50	5·5220351	6·6691635	50	5·5130679	6·6593858
51	5·5178207	6·6564983	51	5·5085183	6·6468061	51	5·4995511	6·6370556
52	5·5041036	6·6334006	52	5·4948012	6·6237351	52	5·4858340	6·6140124
53	5·4901755	6·6095327	53	5·4808731	6·5998938	53	5·4719059	6·5901992
54	5·4760254	6·5848312	54	5·4667230	6·5752188	54	5·4577558	6·5655521

JOINT LIVES:—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	9			10			11	
Age of (x)	$\lambda\ D_{x,\,9}$	$\lambda\ N_{x,\,9}$	Age of (x)	$\lambda\ D_{x,\,10}$	$\lambda\ N_{x,\,10}$	Age of (x)	$\lambda\ D_{x,\,11}$	$\lambda\ N_{x,\,11}$
55	5·4609783	6·5592237	55	5·4516759	6·5496381	55	5·4427087	6·5399997
56	5·4453516	6·5326862	56	5·4360492	6·5231275	56	5·4270820	6·5135174
57	5·4291194	6·5051620	57	5·4198170	6·4956314	57	5·4108498	6·4860497
58	5·4122447	6·4765913	58	5·4029423	6·4670871	58	5·3939751	6·4575354
59	5·3946798	6·4469052	59	5·3853774	6·4374285	59	5·3764102	6·4279055
60	5·3763659	6·4160302	60	5·3670635	6·4065810	60	5·3580963	6·3970875
61	5·3572331	6·3838864	61	5·3479307	6·3744645	61	5·3389635	6·3650004
62	5·3372010	6·3503868	62	5·3278986	6·3409919	62	5·3189314	6·3315575
63	5·3161779	6·3154369	63	5·3068755	6·3060700	63	5·2979083	6·2966652
64	5·2940612	6·2789378	64	5·2847588	6·2695970	64	5·2757916	6·2602229
65	5·2707376	6·2407808	65	5·2614352	6·2314671	65	5·2524680	6·2221218
66	5·2460825	6·2008511	66	5·2367801	6·1915636	66	5·2278129	6·1822486
67	5·2199606	6·1590261	67	5·2106582	6·1497643	67	5·2016910	6·1404788
68	5·1922257	6·1151754	68	5·1829233	6·1059385	68	5·1739561	6·0966820
69	5·1627204	6·0691599	69	5·1534180	6·0599480	69	5·1444508	6·0507200
70	5·1312767	6·0208330	70	5·1219743	6·0116444	70	5·1130071	6·0024452
71	5·0977154	5·9700380	71	5·0884130	5·9608730	71	5·0794458	5·9517012
72	5·0618464	5·9166113	72	5·0525440	5·9074673	72	5·0435768	5·8983236
73	5·0234688	5·8603769	73	5·0141664	5·8512546	73	5·0051992	5·8421367
74	4·9823707	5·8011528	74	4·9730683	5·7920499	74	4·9641011	5·7829581
75	4·9383291	5·7387449	75	4·9290267	5·7296607	75	4·9200595	5·7205936
76	4·8911102	5·6729499	76	4·8818078	5·6638828	76	4·8728106	5·6548396
77	4·8404694	5·6035538	77	4·8311670	5·5945026	77	4·8221998	5·5854820
78	4·7861508	5·5303320	78	4·7768184	5·5212955	78	4·7678812	5·5122966
79	4·7278879	5·4530500	79	4·7185855	5·4440259	79	4·7096183	5·4350478
80	4·6654031	5·3714604	80	4·6561007	5·3624486	80	4·6471335	5·3534888
81	4·5984079	5·2853063	81	4·5891055	5·2763044	81	4·5801383	5·2673636
82	4·5266028	5·1943194	82	4·5173004	5·1853254	82	4·5083332	5·1764009
83	4·4496775	5·0982186	83	4·4403751	5·0892316	83	4·4314079	5·0803220
84	4·3673105	4·9967121	84	4·3580081	4·9877302	84	4·3490409	4·9788345
85	4·2791698	4·8894939	85	4·2698674	4·8805175	85	4·2609002	4·8716342
86	4·1849119	4·7762500	86	4·1756095	4·7672754	86	4·1666423	4·7584047
87	4·0841828	4·6566520	87	4·0748804	4·6476773	87	4·0659132	4·6388156
88	3·9766174	4·5303572	88	3·9673150	4·5213834	88	3·9583478	4·5125301
89	3·8618396	4·3970125	89	3·8525372	4·3880383	89	3·8435700	4·3791918
90	3·7394625	4·2562525	90	3·7301661	4·2472749	90	3·7211929	4·2384356
91	3·6090882	4·1076949	91	3·5997858	4·0987146	91	3·5908186	4·0898790
92	3·4703078	3·9509449	92	3·4610054	3·9419604	92	3·4520382	3·9331298
93	3·3227016	3·7855904	93	3·3133992	3·7766010	93	3·3044320	3·7677731
94	3·1658387	3·6111995	94	3·1565363	3·6022044	94	3·1475691	3·5933791
95	2·9992775	3·4273146	95	2·9899751	3·4183129	95	2·9810079	3·4094891
96	2·8225655	3·2334393	96	2·8132631	3·2244308	96	2·8042959	3·2156082
97	2·6352390	3·0290199	97	2·6259366	3·0200039	97	2·6169694	3·0111816
98	2·4368237	2·8133995	98	2·4275213	2·8043760	98	2·4185541	2·7955540
99	2·2268339	2·5857348	99	2·2175315	2·5767006	99	2·2085643	2·5678788
100	2·0047734	2·3448068	100	1·9954710	2·3357625	100	1·9865038	2·3269381
101	1·7701349	2·0886257	101	1·7608325	2·0795651	101	1·7518653	2·0707370
102	1·5224001	1·8134656	102	1·5130977	1·8043814	102	1·5041305	1·7955443
103	1·2610398	1·5113619	103	1·2517374	1·5022373	103	1·2427702	1·4933814
104	0·9855140	1·1620982	104	0·9762116	1·1529118	104	0·9672444	1·1440135
105	0·6952714		105	0·6859690		105	0·6770018	
106	0·3897502		106	0·3804478		106	0·3714806	
107	0·0683773		107	0·0590749		107	0·0501077	
108	9·7305689		108	9·7212665		108	9·7122993	
109	9·3757301		109	9·3664277		109	9·3574605	

JOINT LIVES:—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	12			13			14	
Age of (x)	$\lambda\ D_{x,\,12}$	$\lambda\ N_{x,\,12}$	Age of (x)	$\lambda\ D_{x,\,13}$	$\lambda\ N_{x,\,13}$	Age of ( )	$\lambda\ D_{x,\,14}$	$\lambda\ N_{x,\,14}$
0	6·1501612	7·3630696	0	6·1415190	7·3517157	0	6·1328911	7·3402033
1	6·0809030	7·3469917	1	6·0722608	7·3356205	1	6·0636329	7·3240892
2	6·0467254	7·3341626	2	6·0380832	7·3227959	2	6·0294553	7·3112680
3	6·0246622	7·3225123	3	6·0160200	7·3111588	3	6·0073921	7·2996435
4	6·0076146	7·3114032	4	5·9989724	7·3000679	4	5·9903445	7·2885702
5	5·9934182	7·3005855	5	5·9848060	7·2892713	5	5·9761781	7·2777948
6	5·9812247	7·2899181	6	5·9725825	7·2786281	6	5·9639546	7·2671750
7	5·9701989	7·2793057	7	5·9615567	7·2680413	7	5·9529288	7·2566141
8	5·9598194	7·2686872	8	5·9511772	7·2574504	8	5·9425493	7·2460500
9	5·9500503	7·2580278	9	5·9414081	7·2468195	9	5·9327802	7·2354481
10	5·9407479	7·2472926	10	5·9321057	7·2361141	10	5·9234778	7·2247726
11	5·9317807	7·2364526	11	5·9231385	7·2253046	11	5·9145106	7·2139938
12	5·9230294	7·2254838	12	5·9143872	7·2143669	12	5·9057593	7·2030878
13	5·9143872	7·2143669	13	5·9057450	7·2032823	13	5·8971171	7·1920353
14	5·9057593	7·2030878	14	5·8971171	7·1920353	14	5·8884892	7·1808212
15	5·8970631	7·1916357	15	5·8884209	7·1806159	15	5·8797930	7·1694349
16	5·8882283	7·1800042	16	5·8795861	7·1690169	16	5·8709582	7·1578694
17	5·8791969	7·1681898	17	5·8705547	7·1572355	17	5·8619268	7·1461212
18	5·8699231	7·1561920	18	5·8612809	7·1452707	18	5·8526530	7·1341905
19	5·8603732	7·1440135	19	5·8517310	7·1331246	19	5·8431031	7·1220785
20	5·8505258	7·1316577	20	5·8418836	7·1208022	20	5·8332557	7·1097897
21	5·8403718	7·1191315	21	5·8317296	7·1083086	21	5·8231017	7·0973302
22	5·8301202	7·1064408	22	5·8214780	7·0956508	22	5·8128501	7·0847063
23	5·8197746	7·0935818	23	5·8111324	7·0828242	23	5·8025045	7·0719136
24	5·8093376	7·0805489	24	5·8006954	7·0698241	24	5·7920675	7·0589473
25	5·7988119	7·0673376	25	5·7901697	7·0566450	25	5·7815418	7·0458020
26	5·7881992	7·0539420	26	5·7795570	7·0432814	26	5·7709291	7·0324717
27	5·7775012	7·0403551	27	5·7688590	7·0297262	27	5·7602311	7·0189495
28	5·7667189	7·0265708	28	5·7580767	7·0159734	28	5·7494488	7·0052299
29	5·7558528	7·0125821	29	5·7472106	7·0020152	29	5·7385827	6·9913038
30	5·7449029	6·9983797	30	5·7362607	6·9878439	30	5·7276328	6·9771642
31	5·7338690	6·9839562	31	5·7252268	6·9734502	31	5·7165989	6·9628022
32	5·7227502	6·9693017	32	5·7141080	6·9588256	32	5·7054801	6·9482084
33	5·7115451	6·9544063	33	5·7029029	6·9439596	33	5·6942750	6·9333731
34	5·7002520	6·9392594	34	5·6916098	6·9288416	34	5·6829819	6 9182852
35	5·6888686	6·9238492	35	5·6802264	6·9134598	35	5·6715985	6·9029331
36	5·6773921	6·9081632	36	5·6687199	6·8978020	36	5·6601220	6·8873043
37	5·6658195	6·8921879	37	5·6571773	6·8818544	37	5·6485494	6·8713855
38	5·6541470	6·8759084	38	5·6455048	6·8656027	38	5·6368769	6·8551621
39	5·6423705	6·8593091	39	5·6337283	6·8490306	39	5·6251004	6·8386184
40	5·6304855	6·8423734	40	5·6218433	6·8321217	40	5·6132154	6·8217374
41	5·6184868	6·8250824	41	5·6098446	6·8148576	41	5·6012167	6·8045004
42	5·6063689	6·8074163	42	5·5977267	6·7972183	42	5·5890988	6·7868883
43	5·5941258	6·7893533	43	5·5854836	6·7791821	43	5·5768557	6·7688792
44	5·5817511	6·7708699	44	5·5731089	6·7607253	44	5·5644810	6·7504496
45	5·5692377	6·7519404	45	5·5605955	6·7418224	45	5·5519676	6·7315737
46	5·5565784	6·7325368	46	5·5479362	6·7224456	46	5·5393083	6·7122238
47	5·5437652	6·7126283	47	5·5351230	6·7025641	47	5·5264951	6·6923692
48	5·5307898	6·6921808	48	5·5221476	6·6821441	48	5 5135197	6·6719764
49	5·5176133	6·6711578	49	5·5090011	6·6611483	49	5·5003732	6·6510081
50	5·5043166	6·6495180	50	5·4956744	6·6395361	50	5·4870165	6·6294232
51	5·4907998	6·6272157	51	5·4821576	6·6172619	51	5·4735297	6·6071765
52	5·4770827	6·6042004	52	5·4684105	6·5942749	52	5·4598126	6·5842176
53	5·4631546	6·5804157	53	5·4545124	6·5705184	53	5·4458845	6·5604891
54	5·4490045	6·5557976	54	5·4403523	6·5459289	54	5·4317344	6·5359277

JOINT LIVES:—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	12			13			14	
Age of (x)	$\lambda\ D_{x,\,12}$	$\lambda\ N_{x,\,12}$	Age of (x)	$\lambda\ D_{x,\,13}$	$\lambda\ N_{x,\,13}$	Age of (x)	$\lambda\ D_{x,\,14}$	$\lambda\ N_{x,\,14}$
55	5·4339574	6·5302737	55	5·4253152	6·5204342	55	5·4166873	6·5104614
56	5·4183307	6·5038206	56	5·4096885	6·4940099	56	5·4010606	6·4840660
57	5·4020985	6·4763823	57	5·3934563	6·4666010	57	5·3848284	6·4566857
58	5·3852238	6·4478975	58	5·3765816	6·4381458	58	5·3679537	6·4282595
59	5·3676589	6·4182985	59	5·3590167	6·4085766	59	5·3503888	6·3987197
60	5·3493450	6·3875102	60	5·3407028	6·3778196	60	5·3320749	6·3679922
61	5·3302122	6·3554538	61	5·3215700	6·3457933	61	5·3129421	6·3359970
62	5·3101801	6·3220418	62	5·3015379	6·3124124	62	5·2929100	6·3026459
63	5·2891570	6·2871806	63	5·2805148	6·2775826	63	5·2718869	6·2678467
64	5·2670403	6·2507692	64	5·2583981	6·2412030	64	5·2497702	6·2314982
65	5·2437167	6·2127004	65	5·2350745	6·2031657	65	5·2264466	6·1934923
66	5·2190616	6·1728580	66	5·2104194	6·1633558	66	5·2017915	6·1537136
67	5·1929397	6·1311203	67	5·1842975	6·1216498	67	5·1756696	6·1120397
68	5·1652048	6·0873551	68	5·1565626	6·0779174	68	5·1479347	6·0683391
69	5·1356995	6·0414243	69	5·1270573	6·0320188	69	5·1184294	6·0224733
70	5·1042558	5·9931804	70	5·0956136	5·9838075	70	5·0869857	5·9742938
71	5·0706945	5·9424674	71	5·0620523	5·9331268	71	5·0534244	5·9236455
72	5·0348255	5·8891201	72	5·0261833	5·8798113	72	5·0175554	5·8703623
73	4·9964179	5·8329637	73	4·9878057	5·8236873	73	4·9791778	5·8142703
74	4·9553198	5·7738149	74	4·9467076	5·7645700	74	4·9380797	5·7551852
75	4·9113082	5·7114794	75	4·9026660	5·7022660	75	4·8940381	5·6929131
76	4·8640893	5·6457537	76	4·8554471	5·6365712	76	4·8468192	5·6272503
77	4·8134485	5·5764239	77	4·8048063	5·5672716	77	4·7961784	5·5579821
78	4·7591299	5·5032649	78	4·7504877	5·4941428	78	4·7418598	5·4848840
79	4·7008670	5·4260419	79	4·6922248	5·4169487	79	4·6835969	5·4077208
80	4·6383822	5·3445082	80	4·6297400	5·3354432	80	4·6211121	5·3262456
81	4·5713870	5·2584057	81	4·5627448	5·2493689	81	4·5541169	5·2402005
82	4·4995819	5·1674668	82	4·4909397	5·1584557	82	4·4823118	5·1493168
83	4·4226566	5·0714092	83	4·4140144	5·0624249	83	4·4053865	5·0533128
84	4·3402896	4·9699417	84	4·3316474	4·9609819	84	4·3230195	4·9518983
85	4·2521489	4·8627603	85	4·2435067	4·8538241	85	4·2348788	4·8447666
86	4·1578910	4·7495485	86	4·1492488	4·7406351	86	4·1406209	4·7316033
87	4·0571619	4·6299781	87	4·0485197	4·6210859	87	4·0398918	4·6120789
88	3·9495965	4·5037064	88	3·9409543	4·4948355	88	3·9323264	4·4858526
89	3·8348187	4·3703826	89	3·8261765	4·3615311	89	3·8175486	4·3525715
90	3·7124416	4·2296389	90	3·7037994	4·2208059	90	3·6951715	4·2118681
91	3·5820673	4·0810956	91	3·5734251	4·0722790	91	3·5647972	4·0633627
92	3·4432869	3·9243553	92	3·4546447	3·9155570	92	3·4260168	3·9066593
93	3·2956807	3·7590102	93	3·2870385	3·7502244	93	3·2784106	3·7413486
94	3·1388178	3·5846241	94	3·1301756	3·5758550	94	3·1215477	3·5669946
95	2·9722566	3·4007429	95	2·9636144	3·3919865	95	2·9549865	3·3831451
96	2·7955446	3·2068698	96	2·7869024	3·1981266	96	2·7782745	3·1893019
97	2·6082181	3·0024508	97	2·5995759	2·9937209	97	2·5909480	2·9849133
98	2·4098028	2·7868302	98	2·4011606	2·7781129	98	2·3925327	2·7693234
99	2·1998130	2·5591618	99	2·1911708	2·5504583	99	2·1825129	2·5416865
100	1·9777525	2·3182282	100	1·9691103	2·3095386	100	1·9604824	2·3007871
101	1·7431146	2·0620326	101	1·7344718	2·0533578	101	1·7258439	2·0446283
102	1·4953792	1·7868444	102	1·4867370	1·7781838	102	1·4781091	1·7694785
103	1·2340189	1·4846798	103	1·2253767	1·4760342	103	1·2167488	1·4673550
104	0·9584931	1·1353012	104	0·9498509	1·1266638	104	0·9412230	1·1180132
105	0·6682505		105	0·6596083		105	0·6509804	
106	0·3627293		106	0·3540871		106	0·3454592	
107	0·0413564		107	0·0327142		107	0·0240863	
108	9·7035480		108	9·6949058		108	9·6862779	
109	9·3487092		109	9·3400670		109	9·3314391	

JOINT LIVES :—Two Females.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	15		16			17		
Age of (x)	λ $D_{x,15}$	λ $N_{x,15}$	Age of (x)	λ $D_{x,16}$	λ $N_{x,16}$	Age of x	λ $D_{x,17}$	λ $N_{x,17}$
0	6·1241949	7·3285215	0	6·1153601	7·3166623	0	6·1063287	7·3046220
1	6·0549367	7·3123866	1	6·0461019	7·3005063	1	6·0370705	7·2884450
2	6·0207591	7·2995685	2	6·0119243	7·2876909	2	6·0028929	7·2756317
3	5·9986959	7·2879562	3	5·9898611	7·2760906	3	5·9808297	7·2640431
4	5·9816483	7·2769000	4	5·9728135	7·2650514	4	5·9637821	7·2530209
5	5·9674819	7·2661456	5	5·9586171	7·2543175	5	5·9496157	7·2423074
6	5·9552584	7·2555491	6	5·9464236	7·2437445	6	5·9373922	7·2317573
7	5·9442326	7·2450137	7	5·9353978	7·2332340	7	5·9263664	7·2212718
8	5·9338531	7·2344771	8	5·9250183	7·2227243	8	5·9159869	7·2107887
9	5·9240840	7·2239033	9	5·9152492	7·2121794	9	5·9062178	7·2002722
10	5·9147816	7·2132577	10	5·9059168	7·2015632	10	5·8969154	7·1896860
11	5·9058144	7·2025101	11	5·8969796	7·1908463	11	5·8879482	7·1789999
12	5·8970631	7·1916357	12	5·8882283	7·1800042	12	5·8791969	7·1681898
13	5·8884209	7·1806159	13	5·8795861	7·1690169	13	5·8705547	7·1572355
14	5·8797930	7·1694349	14	5·8709582	7·1578694	14	5·8619258	7·1461212
15	5·8710968	7·1580822	15	5·8622620	7·1465506	15	5·8532306	7·1348370
16	5·8622620	7·1465506	16	5·8534272	7·1350537	16	5·8443958	7·1233749
17	5·8532306	7·1348370	17	5·8443958	7·1233749	17	5·8353644	7·1117319
18	5·8439568	7·1229407	18	5·8351220	7·1115138	18	5·8260906	7·0999064
19	5·8344069	7·1108634	19	5·8255721	7·0994721	19	5·8165407	7·0879013
20	5·8245595	7·0986098	20	5·8157247	7·0872546	20	5·8066933	7·0757200
21	5·8144055	7·0861850	21	5·8055707	7·0748658	21	5·7965393	7·0633687
22	5·8041539	7·0735963	22	5·7953191	7·0623131	22	5·7862877	7·0508532
23	5·7938083	7·0608391	23	5·7849735	7·0495920	23	5·7759421	7·0381694
24	5·7833713	7·0479074	24	5·7745365	7·0366971	24	5·7655051	7·0253121
25	5·7728456	7·0347972	25	5·7640108	7·0236228	25	5·7549794	7·0122752
26	5·7622329	7·0215015	26	5·7533981	7·0103632	26	5·7443667	6·9990531
27	5·7515349	7·0080139	27	5·7427001	6·9969117	27	5·7336687	6·9856390
28	5·7407526	6·9943282	28	5·7319178	6·9832613	28	5·7228864	6·9720256
29	5·7298865	6·9804360	29	5·7210517	6·9694045	29	5·7120203	6·9582055
30	5·7189366	6·9663297	30	5·7101018	6·9553330	30	5·7010704	6·9441703
31	5·7079027	6·9520005	31	5·6990579	6·9410381	31	5·6900365	6·9299113
32	5·6967839	6·9374392	32	5·6879191	6·9265106	32	5·6789177	6·9154192
33	5·6855788	6·9226356	33	5·6767440	6·9117403	33	5·6677126	6·9006837
34	5·6742857	6·9075791	34	5·6654509	6·8967163	34	5·6564195	6·8856940
35	5·6629023	6·8922578	35	5·6540675	6·8814272	35	5·6450361	6·8704383
36	5·6514258	6·8766594	36	5·6425910	6·8658604	36	5·6335596	6·8549046
37	5·6398532	6·8607703	37	5·6310184	6·8500024	37	5·6219870	6·8390788
38	5·6281807	6·8445764	38	5·6193459	6·8338386	38	5·6103145	6·8229468
39	5·6164042	6·8280615	39	5·6075694	6·8173538	39	5·5985380	6·8064927
40	5·6045192	6·8112091	40	5·5956844	6·8005307	40	5·5866530	6·7897000
41	5·5925205	6·7940004	41	5·5836857	6·7833512	41	5·5746543	6·7725503
42	5·5804026	6·7764159	42	5·5715678	6·7657952	42	5·5625364	6·7550239
43	5·5681595	6·7584343	43	5·5593247	6·7478413	43	5·5502933	6·7370988
44	5·5557848	6·7400319	44	5·5469500	6·7294667	44	5·5379186	6·7187521
45	5·5432714	6·7211834	45	5·5344366	6·7106454	45	5·5254052	6·6999588
46	5·5306121	6·7018604	46	5·5217773	6·6913498	46	5·5127459	6·6806906
47	5·5177989	6·6820328	47	5·5089641	6·6715492	47	5·4999327	6·6609173
48	5·5048235	6·6616669	48	5·4959887	6·6512102	48	5·4869573	6·6406050
49	5·4916770	6·6407257	49	5·4828122	6·6302955	49	5·4738108	6·6197172
50	5·4783503	6·6191680	50	5·4695155	6·6087648	50	5·4604841	6·5982126
51	5·4648335	6·5969486	51	5·4559987	6·5865723	51	5·4469673	6·5760464
52	5·4511164	6·5740168	52	5·4422816	6·5636669	52	5·4332502	6·5531677
53	5·4371883	6·5503159	53	5·4283535	6·5399928	53	5·4193221	6·5295193
54	5·4230382	6·5257821	54	5·4142034	6·5154858	54	5·4051720	6·5050381

JOINT LIVES :—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	15		16			17		
Age of (x)	$\lambda\ D_{x,\,15}$	$\lambda\ N_{x,\,15}$	Age of (x)	$\lambda\ D_{x,\,16}$	$\lambda\ N_{x,\,16}$	Age of (x)	$\lambda\ D_{x,\,17}$	$\lambda\ N_{x,\,17}$
55	5·4079911	6·5003432	55	5·3991563	6·4900736	55	5·3901249	6·4796519
56	5·3923644	6·4739754	56	5·3835296	6·4637324	56	5·3744982	6·4533363
57	5·3761322	6·4466234	57	5·3672974	6·4364071	57	5·3582660	6·4260365
58	5·3592575	6·4182252	58	5·3504227	6·4080361	58	5·3413913	6·3976912
59	5·3416926	6·3887137	59	5·3328578	6·3785516	59	5·3238264	6·3682328
60	5·3233787	6·3580146	60	5·3145439	6·3478800	60	5·3055125	6·3375867
61	5·3042159	6·3260482	61	5·2954111	6·3159406	61	5·2863797	6·3056733
62	5·2842138	6·2927271	62	5·2753790	6·2826471	62	5·2663476	6·2724053
63	5·2631907	6·2579568	63	5·2543559	6·2479053	63	5·2453245	6·2376898
64	5·2410740	6·2216380	64	5·2322392	6·2116138	64	5·2232078	6·2014252
65	5·2177504	6·1836622	65	5·2089156	6·1736663	65	5·1998842	6·1635031
66	5·1930953	6·1439137	66	5·1842605	6·1339464	66	5·1752291	6·1238095
67	5·1669734	6·1022704	67	5·1581386	6·0923315	67	5·1491072	6·0822211
68	5·1392385	6·0586006	68	5·1304037	6·0486903	68	5·1213723	6·0386063
69	5·1097332	6·0127651	69	5·1008984	6·0028841	69	5·0918670	5·9928265
70	5·0782895	5·9646174	70	5·0694547	5·9547648	70	5·0604233	5·9447343
71	5·0447282	5·9139997	71	5·0358934	5·9041771	71	5·0268620	5·8941726
72	5·0085592	5·8607482	72	5·0000244	5·8509542	72	4·9909930	5·8409767
73	4·9704816	5·8046870	73	4·9616468	5·7949227	73	4·9526154	5·7849717
74	4·9293835	5·7456333	74	4·9205487	5·7358980	74	4·9115173	5·7259739
75	4·8853119	5·6833924	75	4·8765071	5·6736865	75	4·8674757	5·6637888
76	4·8381230	5·6177606	76	4·8292882	5·6080838	76	4·8202568	5·5982128
77	4·7874822	5·5485235	77	4·7786474	5·5388760	77	4·7696160	5·5290313
78	4·7331636	5·4754562	78	4·7243288	5·4658379	78	4·7152974	5·4560196
79	4·6749007	5·3983230	79	4·6660659	5·3887337	79	4·6570345	5·3789420
80	4·6124159	5·3168781	80	4·6035811	5·3073169	80	4·5945497	5·2975516
81	4·5454207	5·2308629	81	4·5365859	5·2213303	81	4·5275545	5·2115904
82	4·4736156	5·1400081	82	4·4647808	5·1305039	82	4·4557494	5·1207898
83	4·3966903	5·0440338	83	4·3878555	5·0345570	83	4·3788241	5·0248688
84	4·3143233	4·9426459	84	4·3054885	4·9331977	84	4·2964571	4·9235341
85	4·2261826	4·8355434	85	4·2173478	4·8261202	85	4·2083164	4·8164826
86	4·1319247	4·7224061	86	4·1230899	4·7130115	86	4·1140585	4·7033963
87	4·0311956	4·6029082	87	4·0223608	4·5935386	87	4·0133294	4·5839499
88	3·9236302	4·4767076	88	3·9147954	4·4673634	88	3·9057640	4·4577977
89	3·8088524	4·3434510	89	3·8000176	4·3341317	89	3·7909862	4·3245894
90	3·6864753	4·2027719	90	3·6776405	4·1934766	90	3·6686091	4·1839573
91	3·5561010	4·0542893	91	3·5472662	4·0450181	91	3·5382348	4·0355210
92	3·4173206	3·8976090	92	3·4084858	3·8883603	92	3·3994544	3·8788859
93	3·2697144	3·7323182	93	3·2608796	3·7230927	93	3·2518482	3·7136392
94	3·1128515	3·5579881	94	3·1040167	3·5487824	94	3·0949853	3·5393509
95	2·9462903	3·3741568	95	2·9374555	3·3649738	95	2·9284241	3·3555626
96	2·7695783	3·1803337	96	2·7607435	3·1711716	96	2·7517121	3·1617808
97	2·5822518	2·9759641	97	2·5734170	2·9668234	97	2·5643856	2·9574530
98	2·3838365	2·7603946	98	2·3750017	2·7512737	98	2·3659703	2·7419257
99	2·1738167	2·5327799	99	2·1650119	2·5236827	99	2·1559805	2·5143552
100	1·9517862	2·2919045	100	1·9429514	2·2828325	100	1·9339200	2·2735303
101	1·7171477	2·0357730	101	1·7083129	2·0267334	101	1·6992815	2·0174615
102	1·4694129	1·7606554	102	1·4605781	1·7516532	102	1·4515467	1·7424242
103	1·2080526	1·4585683	103	1·1992178	1·4496126	103	1·1901864	1·4404352
104	0·9325268	1·1092680	104	0·9236920	1·1003671	104	0·9146606	1·0912554
105	0·6422842		105	0·6334494		105	0·6244180	
106	0·3367630		106	0·3279282		106	0·3188968	
107	0·0153901		107	0·0065553		107	9·9975239	
108	9·6775817		108	9·6687469		108	9·6597155	
109	9·3227429		109	9·3139081		109	9·3048767	

JOINT LIVES :—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	18			19			20	
Age of (x)	λ $D_{x,\,18}$	λ $N_{x,\,18}$	Age of (x)	λ $D_{x,\,19}$	λ $N_{x,\,19}$	Age of (x)	λ $D_{x,\,20}$	λ $N_{x,\,20}$
0	6·0970549	7·2923994	0	6·0875050	7·2799971	0	6·0776576	7·2674191
1	6·0277967	7·2762021	1	6·0182468	7·2637794	1	6·0083994	7·2511821
2	5·9936191	7·2633911	2	5·9840692	7·2509710	2	5·9742218	7·2383761
3	5·9715559	7·2518141	3	5·9620060	7·2394056	3	5·9521586	7·2268220
4	5·9545083	7·2408085	4	5·9449584	7·2284163	4	5·9351110	7·2158490
5	5·9403419	7·2301149	5	5·9307920	7·2177429	5	5·9209446	7·2051952
6	5·9281184	7·2195876	6	5·9185685	7·2072379	6	5·9087211	7·1947128
7	5·9170926	7·2091272	7	5·9075127	7·1968022	7	5·8976953	7·1843013
8	5·9067131	7·1986709	8	5·8971632	7·1863720	8	5·8873158	7·1738971
9	5·8969440	7·1881821	9	5·8873941	7·1759114	9	5·8775467	7·1634647
10	5·8876416	7·1776254	10	5·8780917	7·1653841	10	5·8682443	7·1529666
11	5·8786744	7·1669704	11	5·8691245	7·1547598	11	5·8592771	7·1423726
12	5·8699231	7·1561920	12	5·8603732	7·1440135	12	5·8505258	7·1316577
13	5·8612809	7·1452707	13	5·8517310	7·1331246	13	5·8418836	7·1208022
14	5·8526530	7·1341905	14	5·8431031	7·1220785	14	5·8332557	7·1097897
15	5·8439568	7·1229407	15	5·8344069	7·1108634	15	5·8245595	7·0986098
16	5·8351220	7·1115138	16	5·8255721	7·0994721	16	5·8157247	7·0872546
17	5·8260906	7·0999064	17	5·8165407	7·0879013	17	5·8066933	7·0757200
18	5·8168168	7·0881176	18	5·8072669	7·0761494	18	5·7974195	7·0640056
19	5·8072669	7·0761494	19	5·7977170	7·0642191	19	5·7878696	7·0521135
20	5·7974195	7·0640056	20	5·7878696	7·0521135	20	5·7780222	7·0400470
21	5·7872655	7·0516919	21	5·7777156	7·0398387	21	5·7678682	7·0278117
22	5·7770139	7·0392154	22	5·7674640	7·0274011	22	5·7576166	7·0154147
23	5·7666683	7·0265700	23	5·7571184	7·0147956	23	5·7472710	7·0028500
24	5·7562313	7·0137517	24	5·7466814	7·0020174	24	5·7368340	6·9901132
25	5·7457056	7·0007537	25	5·7361557	6·9890597	25	5·7263083	6·9771974
26	5·7350929	6·9875705	26	5·7255430	6·9759170	26	5·7156956	6·9640964
27	5·7243949	6·9741950	27	5·7148450	6·9625819	27	5·7049976	6·9508034
28	5·7136126	6·9606203	28	5·7040627	6·9490474	28	5·6942153	6·9373109
29	5·7027465	6·9468385	29	5·6931966	6·9353057	29	5·6833492	6·9236110
30	5·6917966	6·9328414	30	5·6822467	6·9213482	30	5·6723993	6·9096952
31	5·6807627	6·9186200	31	5·6712128	6·9071662	31	5·6613654	6·8955543
32	5·6696439	6·9041648	32	5·6600940	6·8927500	32	5·6502466	6·8811790
33	5·6584388	6·8894658	33	5·6488889	6·8780891	33	5·6390415	6·8665586
34	5·6471457	6·8745119	34	5·6375958	6·8631729	34	5·6277484	6·8516820
35	5·6357623	6·8592915	35	5·6262124	6·8479896	35	5·6163650	6·8365377
36	5·6242858	6·8437921	36	5·6147359	6·8325265	36	5·6048885	6·8211129
37	5·6127132	6·8280002	37	5·6031633	6·8167699	37	5·5933159	6·8053940
38	5·6010407	6·8119012	38	5·5914908	6·8007058	38	5·5816434	6·7893664
39	5·5892642	6·7954797	39	5·5797143	6·7843182	39	5·5698669	6·7730146
40	5·5773792	6·7787185	40	5·5678293	6·7675903	40	5·5579819	6·7563217
41	5·5653805	6·7615998	41	5·5558306	6·7505037	41	5·5459832	6·7392693
42	5·5532626	6·7441035	42	5·5437127	6·7330392	42	5·5338653	6·7218378
43	5·5410195	6·7262085	43	5·5314696	6·7151749	43	5·5216222	6·7040061
44	5·5286448	6·7078908	44	5·5190949	6·6968878	44	5·5092475	6·6857504
45	5·5161314	6·6891257	45	5·5065815	6·6781521	45	5·4967341	6·6670459
46	5·5034721	6·6698855	46	5·4939222	6·6589404	46	5·4840748	6·6478642
47	5·4906589	6·6501396	47	5·4811090	6·6392228	47	5·4712616	6·6281753
48	5·4776835	6·6298546	48	5·4681336	6·6189652	48	5·4582862	6·6079465
49	5·4645370	6·6089933	49	5·4549871	6·5981312	49	5·4451397	6·5871403
50	5·4512103	6·5875154	50	5·4416604	6·5766798	50	5·4318130	6·5657162
51	5·4376935	6·5653750	51	5·4281436	6·5545659	51	5·4182962	6·5436286
52	5·4239764	6·5425222	52	5·4144265	6·5317384	52	5·4045791	6·5208277
53	5·4100483	6·5188998	53	5·4004984	6·5081415	53	5·3906510	6·4972559
54	5·3958982	6·4944434	54	5·3863483	6·4837106	54	5·3765009	6·4728502

JOINT LIVES :—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	18		19			20		
Age of (x)	λ $D_{x,\,18}$	λ $N_{x,\,18}$	Age of (x)	λ $D_{x,\,19}$	λ $N_{x,\,19}$	Age of (x)	λ $D_{x,\,20}$	λ $N_{x,\,20}$
55	5·3808511	6·4690821	55	5·3713012	6·4583733	55	5·3614538	6·4475377
56	5·3652241	6·4427918	56	5·3556745	6·4321068	56	5·3458271	6·4212951
57	5·3489922	6·4155167	57	5·3394423	6·4048562	57	5·3295949	6·3940676
58	5·3321175	6·3871956	58	5·3225676	6·3765591	58	5·3127202	6·3657943
59	5·3145526	6·3577615	59	5·3050027	6·3471481	59	5·2951553	6·3364065
60	5·2962387	6·3271402	60	5·2866888	6·3165501	60	5·2768414	6·3058306
61	5·2771059	6·2952510	61	5·2675560	6·2846842	61	5·2577086	6·2739874
62	5·2570738	6·2620075	62	5·2475239	6·2514635	62	5·2376765	6·2407888
63	5·2360507	6·2273159	63	5·2265008	6·2167949	63	5·2166534	6·2061416
64	5·2139340	6·1910756	64	5·2043841	6·1805769	64	5·1945367	6·1699453
65	5·1906104	6·1531787	65	5·1810605	6·1427022	65	5·1712131	6·1320918
66	5·1659553	6·1135085	66	5·1564054	6·1030555	66	5·1465580	6·0924659
67	5·1398334	6·0719438	67	5·1302835	6·0615125	67	5·1204361	6·0509444
68	5·1120985	6·0283536	68	5·1025486	6·0179441	68	5·0927012	6·0073957
69	5·0825932	5·9825977	69	5·0730433	5·9722103	69	5·0631959	5·9616821
70	5·0511495	5·9345292	70	5·0415996	5·9241635	70	5·0317522	5·9136549
71	5·0175882	5·8839923	71	5·0080383	5·8736473	71	4·9981909	5·8631585
72	4·9817192	5·8308198	72	4·9721693	5·8204967	72	4·9623219	5·8100269
73	4·9433416	5·7748389	73	4·9337917	5·7645367	73	4·9239143	5·7540857
74	4·9022435	5·7158645	74	4·8926936	5·7055834	74	4·8828462	5·6951509
75	4·8582019	5·6537033	75	4·8486520	5·6434424	75	4·8388046	5·6330283
76	4·8109830	5·5881505	76	4·8014331	5·5779104	76	4·7915857	5·5675138
77	4·7603422	5·5189926	77	4·7507923	5·5087723	77	4·7409449	5·4983936
78	4·7060236	5·4460039	78	4·6964737	5·4358038	78	4·6866263	5·4254420
79	4·6477607	5·3689494	79	4·6382108	5·3587688	79	4·6283634	5·3484239
80	4·5852759	5·2875818	80	4·5757260	5·2774210	80	4·5658786	5·2670921
81	4·5182807	5·2016437	81	4·5087308	5·1915019	81	4·4988834	5·1811897
82	4·4464756	5·1108654	82	4·4369257	5·1007426	82	4·4270783	5·0904461
83	4·3695503	5·0149663	83	4·3600004	5·0048625	83	4·3501530	4·9945811
84	4·2871833	4·9136544	84	4·2776334	4·9035685	84	4·2677860	4·8933023
85	4·1990426	4·8066242	85	4·1894927	4·7965570	85	4·1796453	4·7863048
86	4·1047847	4·6935599	86	4·0952348	4·6835108	86	4·0853874	4·6732735
87	4·0040556	4·5741332	87	3·9945057	4·5641016	87	3·9846583	4·5538780
88	3·8964902	4·4480034	88	3·8869403	4·4379885	88	3·8770929	4·4277788
89	3·7817124	4·3148155	89	3·7721625	4·3048178	89	3·7623151	4·2946212
90	3·6593353	4·1742038	90	3·6497854	4·1642229	90	3·6399380	4·1540394
91	3·5289610	4·0257874	91	3·5194111	4·0158231	91	3·5095637	4·0056523
92	3·3901806	3·8691718	92	3·3806307	3·8592236	92	3·3707833	3·8490654
93	3·2425744	3·7039454	93	3·2330245	3·6940126	93	3·2231771	3·6838662
94	3·0857115	3·5296754	94	3·0761616	3·5197598	94	3·0663142	3·5096245
95	2·9191503	3·3459060	95	2·9096004	3·3360052	95	2·8997530	3·3258824
96	2·7424383	3·1521430	96	2·7328884	3·1422574	96	2·7230410	3·1321466
97	2·5551118	2·9478335	97	2·5455619	2·9379640	97	2·5357145	2·9278644
98	2·3566965	2·7323254	98	2·3471466	2·7224710	98	2·3372992	2·7123837
99	2·1467067	2·5047766	99	2·1371568	2·4949390	99	2·1273094	2·4848633
100	1·9246462	2·2639732	100	1·9150963	2·2541551	100	1·9052489	2·2440940
101	1·6900077	2·0079312	101	1·6804578	1·9981351	101	1·6706104	1·9880905
102	1·4422729	1·7329299	102	1·4327230	1·7231616	102	1·4228756	1·7131376
103	1·1809126	1·4309985	103	1·1713627	1·4212732	103	1·1615153	1·4112762
104	0·9053868	1·0818907	104	0·8958369	1·0722425	104	0·8859895	1·0622924
105	0·6151442		105	0·6055943		105	0·5957469	
106	0·3096230		106	0·3000731		106	0·2902257	
107	9·9882501		107	9·9787002		107	9·9688528	
108	9·6504417		108	9·6408918		108	9·6310444	
109	9·2956029		109	9·2860530		109	9·2762056	

JOINT LIVES:—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	21			22			23	
Age of (x)	$\lambda\ D_{x,\ 21}$	$\lambda\ N_{x,\ 21}$	Age of (x)	$\lambda\ D_{x,\ 22}$	$\lambda\ N_{x,\ 22}$	Age of (x)	$\lambda\ D_{x,\ 23}$	$\lambda\ N_{x,\ 23}$
0	6·0675036	7·2546723	0	6·0572520	7·2417665	0	6·0469064	7·2286980
1	5·9982454	7·2384160	1	5·9879938	7·2254897	1	5·9776482	7·2123988
2	5·9640678	7·2256124	2	5·9538162	7·2126874	2	5·9434706	7·1995975
3	5·9420046	7·2140694	3	5·9317530	7·2011550	3	5·9214074	7·1880748
4	5·9219570	7·2031126	4	5·9147054	7·1902134	4	5·9043598	7·1771485
5	5·9107906	7·1924779	5	5·9005390	7·1795980	5	5·8901934	7·1665515
6	5·8985671	7·1820173	6	5·8883155	7·1691594	6	5·8779099	7·1561340
7	5·8875413	7·1716302	7	5·8772897	7·1587956	7	5·8669441	7·1457941
8	5·8771618	7·1612521	8	5·8669102	7·1484434	8	5·8565646	7·1354669
9	5·8673927	7·1508469	9	5·8571411	7·1380657	9	5·8467955	7·1251164
10	5·8580903	7·1403779	10	5·8478387	7·1276256	10	5·8374931	7·1147046
11	5·8491231	7·1298146	11	5·8388715	7·1170922	11	5·8285259	7·1042019
12	5·8403718	7·1191315	12	5·8301202	7·1064408	12	5·8197746	7·0935818
13	5·8317296	7·1083086	13	5·8214780	7·0956508	13	5·8111324	7·0828242
14	5·8231017	7·0973302	14	5·8128501	7·0847063	14	5·8025045	7·0719136
15	5·8144055	7·0861850	15	5·8041539	7·0735963	15	5·7938083	7·0608391
16	5·8055707	7·0748658	16	5·7953191	7·0623131	16	5·7849735	7·0495920
17	5·7965393	7·0633687	17	5·7862877	7·0508532	17	5·7759421	7·0381694
18	5·7872655	7·0516919	18	5·7770139	7·0392154	18	5·7666683	7·0265700
19	5·7777156	7·0398387	19	5·7674640	7·0274011	19	5·7571184	7·0147956
20	5·7678682	7·0278117	20	5·7576166	7·0154147	20	5·7472710	7·0028500
21	5·7577142	7·0156171	21	5·7474626	7·0032615	21	5·7371170	6·9907391
22	5·7474626	7·0032615	22	5·7372110	6·9909479	22	5·7268654	6·9784687
23	5·7371170	6·9907391	23	5·7268654	6·9784687	23	5·7165198	6·9660338
24	5·7266800	6·9780445	24	5·7164284	6·9658183	24	5·7060828	6·9534284
25	5·7161543	6·9651721	25	5·7059027	6·9529899	25	5·6955571	6·9406461
26	5·7055416	6·9521146	26	5·6952900	6·9399778	26	5·6849144	6·9276800
27	5·6948136	6·9388652	27	5·6845920	6·9267739	27	5·6742164	6·9145234
28	5·6840613	6·9254164	28	5·6738097	6·9133706	28	5·6634641	6·9011677
29	5·6731952	6·9117602	29	5·6629136	6·8997602	29	5·6525980	6·8876048
30	5·6622153	6·8978880	30	5·6519937	6·8859336	30	5·6416181	6·8738261
31	5·6512114	6·8837906	31	5·6409598	6·8718817	31	5·6306142	6·8598219
32	5·6400926	6·8694581	32	5·6298110	6·8575945	32	5·6194954	6·8455823
33	5·6288875	6·8548803	33	5·6186359	6·8430614	33	5·6082903	6·8310966
34	5·6175944	6·8400457	34	5·6073128	6·8282713	34	5·5969972	6·8163532
35	5·6062110	6·8249427	35	5·5959594	6·8132120	35	5·5856138	6·8013404
36	5·5947345	6·8095583	36	5·5844829	6·7978707	36	5·5741373	6·7860449
37	5·5831619	6·7938791	37	5·5729103	6·7822339	37	5·5625647	6·7704528
38	5·5714894	6·7778907	38	5·5612378	6·7662868	38	5·5508922	6·7545499
39	5·5597129	6·7615767	39	5·5494613	6·7500136	39	5·5391157	6·7383200
40	5·5478279	6·7449211	40	5·5375763	6·7333972	40	5·5272307	6·7217459
41	5·5358292	6·7279049	41	5·5255776	6·7164198	41	5·5152320	6·7048095
42	5·5237113	6·7105086	42	5·5134597	6·6990612	42	5·5031141	6·6874913
43	5·5114682	6·6927110	43	5·5012166	6·6813002	43	5·4908710	6·6697693
44	5·4990935	6·6744838	44	5·4888119	6·6631134	44	5·4784963	6·6516207
45	5·4865801	6·6558167	45	5·4763285	6·6444759	45	5·4659829	6·6330199
46	5·4739208	6·6366668	46	5·4636692	6·6253596	46	5·4533236	6·6139396
47	5·4611076	6·6170087	47	5·4508560	6·6057345	47	5·4405104	6·5943492
48	5·4481322	6·5968093	48	5·4378806	6·5855667	48	5·4275350	6·5742158
49	5·4349857	6·5760324	49	5·4247341	6·5648201	49	5·4143885	6·5535018
50	5·4216590	6·5546364	50	5·4114074	6·5434544	50	5·4010618	6·5321671
51	5·4081422	6·5325763	51	5·3978906	6·5214236	51	5·3875150	6·5101673
52	5·3944251	6·5098023	52	5·3841735	6·4986777	52	5·3738279	6·4874510
53	5·3804970	6·4862571	53	5·3702454	6·4751595	53	5·3598998	6·4639622
54	5·3663169	6·4618765	54	5·3560953	6·4508061	54	5·3457197	6·4396364

JOINT LIVES :—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	21			22			23	
Age of (x)	λ $D_{x,\,21}$	λ $N_{x,\,21}$	**Age** of (x)	λ $D_{x,\,22}$	λ $N_{x,\,22}$	**Age** of (x)	λ $D_{x,\,23}$	λ $N_{x,\,23}$
55	5·3512998	6·4365893	55	5·3410482	6·4255442	55	5·3307026	6·4144022
56	5·3356731	6·4103713	56	5·3254215	6·3993518	56	5·3150759	6·3882356
57	5·3194409	6·3831674	57	5·3091893	6·3721729	57	5·2988437	6·3610827
58	5·3025662	6·3549169	58	5·2923146	6·3439462	58	5·2819690	6·3328814
59	5·2850013	6·3255526	59	5·2747497	6·3146049	59	5·2644041	6·3035643
60	5·2666874	6·2949996	60	5·2564358	6·2840757	60	5·2460902	6·2730583
61	5·2475546	6·2631779	61	5·2373030	6·2522769	61	5·2269574	6·2412835
62	5·2275225	6·2300013	62	5·2172709	6·2191223	62	5·2069253	6·2081518
63	5·2064994	6·1953757	63	5·1962478	6·1845186	63	5·1859022	6·1735699
64	5·1843827	6·1592001	64	5·1741311	6·1483645	64	5·1637855	6·1374380
65	5·1610591	6·1213674	65	5·1508075	6·1105523	65	5·1404619	6·0996471
66	5·1364040	6·0817616	66	5·1261524	6·0709672	66	5·1158068	6·0600827
67	5·1102821	6·0402601	67	5·1000305	6·0294856	67	5·0896849	6·0186219
68	5·0825472	5·9967318	68	5·0722956	5·9859767	68	5·0619500	5·9751330
69	5·0530419	5·9510367	69	5·0427903	5·9403018	69	5·0324147	5·9294771
70	5·0215982	5·9030287	70	5·0113466	5·8923123	70	5·0010010	5·8815068
71	4·9880369	5·8525503	71	4·9777853	5·8418524	71	4·9674397	5·8310654
72	4·9521679	5·7994367	72	4·9419163	5·7887566	72	4·9315707	5·7779880
73	4·9137903	5·7435131	73	4·9035387	5·7328507	73	4·8931931	5·7220995
74	4·8726922	5·6845954	74	4·8624406	5·6739500	74	4·8520950	5·6632163
75	4·8286506	5·6224894	75	4·8183990	5·6118607	75	4·8080534	5·6011435
76	4·7814317	5·5569915	76	4·7711801	5·5463789	76	4·7608345	5·5356780
77	4·7307909	5·4878867	77	4·7205393	5·4772901	77	4·7101937	5·4666047
78	4·6764723	5·4149506	78	4·6662207	5·4043689	78	4·6558751	5·3936994
79	4·6182094	5·3379472	79	4·6079578	5·3273806	79	4·5976122	5·3167252
80	4·5557246	5·2566302	80	4·5454730	5·2460776	80	4·5351274	5·2354368
81	4·4887294	5·1707413	81	4·4784778	5·1602028	81	4·4681322	5·1495754
82	4·4169243	5·0800117	82	4·4066727	5·0694861	82	4·3963271	5·0588722
83	4·3399990	4·9841599	83	4·3297474	4·9736478	83	4·3194018	4·9630461
84	4·2576320	4·8828938	84	4·2473804	4·8723940	84	4·2370348	4·8618055
85	4·1694913	4·7759089	85	4·1592397	4·7654212	85	4·1488941	4·7548442
86	4·0752334	4·6628881	86	4·0649818	4·6524126	86	4·0546362	4·6418477
87	3·9745043	4·5435049	87	3·9642527	4·5330401	87	3·9539071	4·5224860
88	3·8669389	4·4174165	88	3·8566873	4·4069626	88	3·8463417	4·3964189
89	3·7521611	4·2842699	89	3·7419095	4·2738258	89	3·7315639	4·2632928
90	3·6297840	4·1436976	90	3·6195324	4·1332642	90	3·6091868	4·1227403
91	3·4994097	3·9953205	91	3·4891581	3·9848962	91	3·4788125	3·9743822
92	3·3606293	3·8387427	92	3·3503777	3·8283280	92	3·3400321	3·8178224
93	3·2130231	3·6735536	93	3·2027715	3·6631466	93	3·1924259	3·6526505
94	3·0561602	3·4993199	94	3·0459086	3·4889228	94	3·0355630	3·4784337
95	2·8895990	3·3155866	95	2·8793474	3·3051969	95	2·8690018	3·2947171
96	2·7128870	3·1218588	96	2·7026354	3·1114779	96	2·6922898	3·1010053
97	2·5255605	2·9175853	97	2·5153089	2·9072119	97	2·5049633	2·8967483
98	2·3271452	2·7021125	98	2·3168936	2·6917479	98	2·3065480	2·6812910
99	2·1171554	2·4746008	99	2·1069038	2·4642450	99	2·0965582	2·4537967
100	1·8950949	2·2338410	100	1·8848133	2·2234938	100	1·8744977	2·2130554
101	1·6604564	1·9778484	101	1·6502048	1·9675119	101	1·6398592	1·9570837
102	1·4127216	1·7029102	102	1·4024700	1·6925861	102	1·3921244	1·6821713
103	1·1513613	1·4010661	103	1·1411097	1·3907620	103	1·1307641	1·3803614
104	0·8758355	1·0521050	104	0·8655839	1·0418229	104	0·8552383	1·0314489
105	0·5855929		105	0·5753113		105	0·5649957	
106	0·2800717		106	0·2698201		106	0·2594745	
107	9·9580988		107	9·9484172		107	9·9381016	
108	9·6208904		108	9·6106388		108	9·6002932	
109	9·2660516		109	9·2558000		109	9·2454544	

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Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	24		25			26		
Age of (x)	λ $D_{x,\,24}$	λ $N_{x,\,24}$	Age of (x)	λ $D_{x,\,25}$	λ $N_{x,\,25}$	Age of (x)	λ $D_{x,\,26}$	λ $N_{x,\,26}$
0	6·0364694	7·2154620	0	6·0259437	7·2020536	0	6·0153310	7·1884676
1	5·9672112	7·1991390	1	5·9566855	7·1857050	1	5·9460728	7·1720916
2	5·9330336	7·1863372	2	5·9225079	7·1729023	2	5·9118952	7·1592868
3	5·9109704	7·1748242	3	5·9004447	7·1613977	3	5·8898320	7·1477900
4	5·8939228	7·1639121	4	5·8833971	7·1505000	4	5·8727844	7·1369060
5	5·8797564	7·1533334	5	5·8692307	7·1399389	5	5·8586180	7·1263623
6	5·8675329	7·1429370	6	5·8570072	7·1295629	6	5·8463945	7·1160067
7	5·8565071	7·1326202	7	5·8459814	7·1192688	7	5·8353687	7·1057350
8	5·8461276	7·1223182	8	5·8356019	7·1089920	8	5·8249892	7·0954821
9	5·8363585	7·1119943	9	5·8258328	7·0986942	9	5·8152201	7·0852110
10	5·8270561	7·1016113	10	5·8165304	7·0883393	10	5·8059177	7·0748837
11	5·8180889	7·0911382	11	5·8075632	7·0778957	11	5·7969505	7·0644692
12	5·8093376	7·0805489	12	5·7988119	7·0673376	12	5·7881992	7·0539420
13	5·8006954	7·0698241	13	5·7901697	7·0566450	13	5·7795570	7·0432814
14	5·7920675	7·0589473	14	5·7815418	7·0458020	14	5·7709291	7·0324717
15	5·7833713	7·0479074	15	5·7728456	7·0347972	15	5·7622329	7·0215015
16	5·7745365	7·0366971	16	5·7640108	7·0236228	16	5·7533981	7·0103632
17	5·7655051	7·0253121	17	5·7549794	7·0122752	17	5·7443667	6·9990531
18	5·7562313	7·0137517	18	5·7457056	7·0007537	18	5·7350929	6·9875705
19	5·7466814	7·0020174	19	5·7361557	6·9890597	19	5·7255430	6·9759170
20	5·7368340	6·9901132	20	5·7263083	6·9771974	20	5·7156956	6·9640964
21	5·7266800	6·9780445	21	5·7161543	6·9651721	21	5·7055416	6·9521146
22	5·7164284	6·9658183	22	5·7059027	6·9529899	22	5·6952900	6·9399778
23	5·7060828	6·9534284	23	5·6955571	6·9406461	23	5·6849144	6·9276800
24	5·6956458	6·9408692	24	5·6851201	6·9281340	24	5·6745074	6·9152159
25	5·6851201	6·9281340	25	5·6745944	6·9154471	25	5·6639817	6·9025784
26	5·6745074	6·9152159	26	5·6639817	6·9025784	26	5·6533690	6·8897602
27	5·6638094	6·9021076	27	5·6532837	6·8895203	27	5·6426710	6·8767536
28	5·6530271	6·8888014	28	5·6425014	6·8762645	28	5·6318887	6·8635505
29	5·6421610	6·8752882	29	5·6316353	6·8628031	29	5·6210226	6·8501419
30	5·6312111	6·8615592	30	5·6206854	6·8491261	30	5·6100727	6·8365190
31	5·6201772	6·8476050	31	5·6096515	6·8352240	31	5·5990388	6·8226714
32	5·6090584	6·8334153	32	5·5985327	6·8210865	32	5·5879200	6·8085884
33	5·5978533	6·8189793	33	5·5873276	6·8067028	33	5·5767149	6·7942594
34	5·5865602	6·8042854	34	5·5760345	6·7920609	34	5·5654218	6·7796722
35	5·5751768	6·7893214	35	5·5646511	6·7771487	35	5·5540384	6·7648145
36	5·5637003	6·7740745	36	5·5531746	6·7619529	36	5·5425619	6·7496729
37	5·5521277	6·7585303	37	5·5416020	6·7464596	37	5·5309893	6·7342330
38	5·5404552	6·7426742	38	5·5299295	6·7306533	38	5·5193168	6·7184800
39	5·5286787	6·7264902	39	5·5181530	6·7145185	39	5·5075403	6·7023973
40	5·5167937	6·7099616	40	5·5062680	6·6980377	40	5·4956553	6·6859678
41	5·5047950	6·6930693	41	5·4942693	6·6811929	41	5·4836566	6·6691731
42	5·4926771	6·6757937	42	5·4821514	6·6639633	42	5·4715387	6·6519932
43	5·4804340	6·6581140	43	5·4699083	6·6463281	43	5·4592956	6·6344058
44	5·4680593	6·6400059	44	5·4575336	6·6282640	44	5·4469209	6·6163883
45	5·4555459	6·6214447	45	5·4450202	6·6097452	45	5·4344075	6·5979154
46	5·4428866	6·6024027	46	5·4323609	6·5907443	46	5·4217482	6·5789585
47	5·4300734	6·5828497	47	5·4195477	6·5712308	47	5·4089350	6·5594882
48	5·4170980	6·5627520	48	5·4065723	6·5511722	48	5·3959596	6·5394705
49	5·4039515	6·5420735	49	5·3934258	6·5305309	49	5·3828131	6·5188698
50	5·3906248	6·5207727	50	5·3800991	6·5092668	50	5·3694864	6·4976443
51	5·3771080	6·4988049	51	5·3665823	6·4873342	51	5·3559696	6·4757496
52	5·3633909	6·4761208	52	5·3528652	6·4646828	52	5·3422525	6·4531347
53	5·3494628	6·4526623	53	5·3389371	6·4412575	53	5·3283244	6·4297431
54	5·3353127	6·4283665	54	5·3247870	6·4169928	54	5·3141743	6·4055127

JOINT LIVES :—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	24			25			26	
Age of (x)	$\lambda\ D_{x,\,24}$	$\lambda\ N_{x,\,24}$	Age of (x)	$\lambda\ D_{x,\,25}$	$\lambda\ N_{x,\,25}$	Age of (x)	$\lambda\ D_{x,\,26}$	$\lambda\ N_{x,\,26}$
55	5·3202656	6·4031603	55	5·3097399	6·3918173	55	5·2991272	6·3803692
56	5·3046389	6·3770222	56	5·2941132	6·3657079	56	5·2835005	6.3542910
57	5·2884067	6·3498954	57	5·2778810	6·3386102	57	5·2672683	6·3272230
58	5·2715320	6·3217206	58	5·2610063	6·3104621	58	5·2503936	6·2991047
59	5·2539671	6·2924293	59	5·2434414	6·2811977	59	5·2328287	6·2698677
60	5·2356532	6·2619477	60	5·2251275	6·2507425	60	5·2145148	6·2394396
61	5·2165204	6·2301965	61	5·2059947	6·2190161	61	5·1953820	6·2077399
62	5·1964883	6·1970889	62	5·1859626	6·1859324	62	5·1753499	6·1746815
63	5·1754652	6·1625303	63	5·1649395	6·1513980	63	5·1543268	6·1401717
64	5·1533485	6·1264205	64	5·1428228	6·1153116	64	5·1322101	6·1041097
65	5·1300249	6·0886520	65	5·1194992	6·0775652	65	5·1088865	6·0663867
66	5·1053698	6·0491087	66	5·0948441	6·0380444	66	5·0842314	6·0268882
67	5·0792479	6·0076680	67	5·0687222	5·9966251	67	5·0581095	5·9854916
68	5·0515130	5·9641997	68	5·0409873	5·9531772	68	5·0303746	5·9420646
69	5·0220077	5·9185640	69	5·0114820	5·9075618	69	5·0008693	5·8964700
70	4·9905640	5·8706127	70	4·9800383	5·8596305	70	4·9694256	5·8485589
71	4·9570027	5·8201904	71	4·9464770	5·8092271	71	4·9358643	5·7981755
72	4·9211337	5·7671311	72	4·9106080	5·7561866	72	4·8999953	5·7451539
73	4·8827561	5·7112607	73	4·8722304	5·7003341	73	4·8616177	5·6893200
74	4·8416580	5·6523944	74	4·8311323	5·6414857	74	4·8205196	5·6304891
75	4·7976164	5·5903390	75	4·7870907	5·5794468	75	4·7764780	5·5684680
76	4·7503975	5·5248893	76	4·7398718	5·5140142	76	4·7292591	5·5030516
77	4·6997567	5·4558321	77	4·6892310	5·4449725	77	4·6786183	5·4340267
78	4·6454381	5·3829418	78	4·6349124	5·3720977	78	4·6242997	5·3611673
79	4·5871752	5·3059832	79	4·5766495	5·2951537	79	4·5660368	5·2842382
80	4·5246904	5·2247083	80	4·5141647	5·2138943	80	4·5035520	5·2029929
81	4·4576952	5·1388611	81	4·4471695	5·1280599	81	4·4365568	5·1171738
82	4·3858901	5·0481710	82	4·3753644	5·0373835	82	4·3647517	5·0265100
83	4·3089648	4·9523579	83	4·2984391	4·9415830	83	4·2878264	4·9307230
84	4·2265978	4·8511287	84	4·2160721	4·8403665	84	4·2054594	4·8295186
85	4·1384571	4·7441803	85	4·1279314	4·7334292	85	4·1173187	4·7225936
86	4·0441992	4·6311941	86	4·0336735	4·6204557	86	4·0230608	4·6096307
87	3·9434701	4·5118442	87	3·9329444	4·5011161	87	3·9223317	4·4903027
88	3·8359047	4·3857877	88	3·8253790	4·3750701	88	3·8147663	4·3642668
89	3·7211269	4·2526716	89	3·7106012	4·2419638	89	3·6999885	4·2311710
90	3·5987498	4·1121292	90	3·5882241	4·1014311	90	3·5776114	4·0906478
91	3·4683755	3·9637798	91	3·4578498	3·9530915	91	3·4472371	3·9423172
92	3·3295951	3·8072291	92	3·3190694	3·7965494	92	3·3084567	3·7857845
93	3·1819889	3·6420656	93	3·1714632	3·6313940	93	3·1608505	3·6206378
94	3·0251260	3·4678581	94	3·0146003	3·4571944	94	3·0039876	3·4464456
95	2·8585648	3·2841491	95	2·8480391	3·2734936	95	2·8374264	3·2627529
96	2·6818528	3·0904450	96	2·6713271	3·0797983	96	2·6607144	3·0690651
97	2·4945263	2·8861945	97	2·4840006	2·8755555	97	2·4733879	2·8648307
98	2·2961110	2·6707467	98	2·2855853	2·6601138	98	2·2749726	2·6493972
99	2·0861212	2·4432599	99	2·0755955	2·4326358	99	2·0649828	2·4219262
100	1·8640607	2·2025276	100	1·8535350	2·1919130	100	1·8429223	2·1812122
101	1·6294222	1·9465667	101	1·6188965	1·9359620	101	1·6082838	1·9252718
102	1·3816874	1·6716661	102	1·3711617	1·6610750	102	1·3605490	1·6503969
103	1·1203271	1·3698724	103	1·1098014	1·3592965	103	1·0991887	1·3486358
104	0·8448013	1·0209783	104	0·8342756	1·0104230	104	0·8236629	0·9997828
105	0·5545587		105	0·5440330		105	0·5334203	
106	0·2490375		106	0·2385118		106	0·2278991	
107	9·9276646		107	9·9171389		107	9·9065262	
108	9·5898562		108	9·5793305		108	9·5687178	
109	9·2350174		109	9·2244917		109	9·2138790	

JOINT LIVES :—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	27			28			29	
Age of (x)	λ $D_{x,\,27}$	λ $N_{x,\,27}$	Age of (x)	λ $D_{x,\,28}$	λ $N_{x,\,28}$	Age of (x)	λ $D_{x,\,29}$	λ $N_{x,\,29}$
0	6·0046330	7·1746976	0	5·9938507	7·1607374	0	5·9829846	7·1465795
1	5·9353748	7·1582925	1	5·9245925	7·1443004	1	5·9137264	7·1301091
2	5·9011972	7·1454845	2	5·8904149	7·1314884	2	5·8795488	7·1172915
3	5·8791340	7·1339950	3	5·8683517	7·1200061	3	5·8574856	7·1058149
4	5·8620864	7·1231239	4	5·8513041	7·1091474	4	5·8404380	7·0949684
5	5·8479200	7·1125974	5	5·8371377	7·0986372	5	5·8262716	7·0844744
6	5·8356965	7·1022614	6	5·8249142	7·0883204	6	5·8140481	7·0741769
7	5·8246707	7·0920119	7	5·8138884	7·0780931	7	5·8030223	7·0639707
8	5·8142912	7·0817832	8	5·8035089	7·0678881	8	5·7926428	7·0537893
9	5·8045221	7·0715374	9	5·7937398	7·0576676	9	5·7828737	7·0435941
10	5·7952197	7·0612375	10	5·7844374	7·0473948	10	5·7735713	7·0333481
11	5·7862525	7·0508521	11	5·7754702	7·0370379	11	5·7646041	7·0230190
12	5·7775012	7·0403551	12	5·7667189	7·0265708	12	5·7558528	7·0125821
13	5·7688590	7·0297262	13	5·7580767	7·0159734	13	5·7472106	7·0020152
14	5·7602311	7·0189495	14	5·7494488	7·0052299	14	5·7385827	6·9913038
15	5·7515349	7·0080139	15	5·7407526	6·9943282	15	5·7298865	6·9804360
16	5·7427001	6·9969117	16	5·7319178	6·9832613	16	5·7210517	6·9694045
17	5·7336687	6·9856390	17	5·7228864	6·9720256	17	5·7120203	6·9582055
18	5·7243949	6·9741950	18	5·7136126	6·9606203	18	5·7027465	6·9468385
19	5·7148450	6·9625819	19	5·7040627	6·9490474	19	5·6931966	6·9353057
20	5·7049976	6·9508034	20	5·6942153	6·9373109	20	5·6833492	6·9236110
21	5·6948436	6·9388652	21	5·6840613	6·9254164	21	5·6731952	6·9117602
22	5·6845920	6·9267739	22	5·6738097	6·9133706	22	5·6629436	6·8997602
23	5·6742464	6·9145234	23	5·6634641	6·9011677	23	5·6525980	6·8876048
24	5·6638094	6·9021076	24	5·6530271	6·8888014	24	5·6421610	6·8752882
25	5·6532837	6·8895203	25	5·6425014	6·8762645	25	5·6316353	6·8628031
26	5·6426710	6·8767536	26	5·6318887	6·8635505	26	5·6210226	6·8501419
27	5·6319730	6·8637999	27	5·6211907	6·8506508	27	5·6103246	6·8372972
28	5·6211907	6·8506508	28	5·6104084	6·8375570	28	5·5995423	6·8242599
29	5·6103246	6·8372972	29	5·5995423	6·8242599	29	5·5886762	6·8110209
30	5·5993747	6·8237298	30	5·5885924	6·8107501	30	5·5777263	6·7975702
31	5·5883408	6·8099387	31	5·5775585	6·7970171	31	5·5666924	6·7838976
32	5·5772220	6·7959128	32	5·5664397	6·7830506	32	5·5555736	6·7699920
33	5·5660169	6·7816409	33	5·5552346	6·7688383	33	5·5443685	6·7558420
34	5·5547238	6·7671111	34	5·5439415	6·7543684	34	5·5330754	6·7414346
35	5·5433404	6·7523106	35	5·5325581	6·7396279	35	5·5216920	6·7267569
36	5·5318639	6·7372259	36	5·5210816	6·7246033	36	5·5102155	6·7117952
37	5·5202913	6·7218429	37	5·5095090	6·7092798	37	5·4986129	6·6965346
38	5·5086188	6·7061457	38	5·4978365	6·6936423	38	5·4869704	6·6809596
39	5·4968423	6·6901187	39	5·4860600	6·6776739	39	5·4751939	6·6650537
40	5·4849573	6·6737439	40	5·4741750	6·6613574	40	5·4633089	6·6487985
41	5·4729586	6·6570028	41	5·4621763	6·6446735	41	5·4513102	6·6321755
42	5·4608407	6·6398752	42	5·4500584	6·6276021	42	5·4391923	6·6151643
43	5·4485976	6·6223399	43	5·4378153	6·6101214	43	5·4269492	6·5977425
44	5·4362229	6·6043724	44	5·4254406	6·5922085	44	5·4145745	6·5798865
45	5·4237095	6·5859480	45	5·4129272	6·5738363	45	5·4020611	6·5615715
46	5·4110502	6·5670392	46	5·4002679	6·5549782	46	5·3894018	6·5427680
47	5·3982370	6·5476147	47	5·3874547	6·5356038	47	5·3765886	6·5234467
48	5·3852616	6·5276420	48	5·3744793	6·5156790	48	5·3636132	6·5035743
49	5·3721151	6·5070838	49	5·3613328	6·4951677	49	5·3504667	6·4831130
50	5·3587884	6·4859006	50	5·3480061	6·4740289	50	5·3371400	6·4620228
51	5·3452716	6·4640460	51	5·3344893	6·4522180	51	5·3236232	6·4402583
52	5·3315545	6·4414703	52	5·3207722	6·4296839	52	5·3099061	6·4177698
53	5·3176264	6·4181164	53	5·3068441	6·4063708	53	5·2959780	6·3945001
54	5·3034763	6·3939208	54	5·2926940	6·3822141	54	5·2818279	6·3703854

JOINT LIVES:—Two Females.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	27			28			29	
Age of (x)	λ $D_{x,27}$	λ $N_{x,27}$	Age of (x)	λ $D_{x,28}$	λ $N_{x,28}$	Age of (x)	λ $D_{x,29}$	λ $N_{x,29}$
55	5·2884292	6·3688126	55	5·2776469	6·3571417	55	5·2667808	6·3453533
56	5·2728025	6·3427674	56	5·2620202	6·3311332	56	5·2511541	6·3193818
57	5·2565703	6·3157315	57	5·2457880	6·3041314	57	5·2349219	6·2924175
58	5·2396956	6·2876437	58	5·2289133	6·2760763	58	5·2180472	6·2643977
59	5·2221307	6·2584371	59	5·2113484	6·2469012	59	5·2004823	6·2352565
60	5·2038168	6·2280373	60	5·1930345	6·2165325	60	5·1821684	6·2049203
61	5·1846840	6·1963653	61	5·1739017	6·1848896	61	5·1630356	6·1733089
62	5·1646519	6·1633341	62	5·1538696	6·1518866	62	5·1430035	6·1403358
63	5·1436288	6·1288498	63	5·1328465	6·1174298	63	5·1219804	6·1059082
64	5·1215121	6·0928126	64	5·1107298	6·0814186	64	5·0998637	6·0699252
65	5·0981885	6·0551144	65	5·0874062	6·0437460	65	5·0765401	6·0322786
66	5·0735334	6·0156397	66	5·0627511	6·0042960	66	5·0518850	5·9928552
67	5·0474115	5·9742652	67	5·0366292	5·9629458	67	5·0257631	5·9515298
68	5·0196766	5·9308615	68	5·0088943	5·9195644	68	4·9980282	5·9081726
69	4·9901713	5·8852879	69	4·9793890	5·8740135	69	4·9685229	5·8626448
70	4·9587276	5·8373977	70	4·9479453	5·8261448	70	4·9370792	5·8147985
71	4·9251663	5·7870341	71	4·9143840	5·7758023	71	4·9035179	5·7644778
72	4·8892973	5·7340323	72	4·8785150	5·7228204	72	4·8676489	5·7115170
73	4·8509197	5·6782171	73	4·8401374	5·6670251	73	4·8292713	5·6557413
74	4·8098216	5·6194048	74	4·7990393	5·6082313	74	4·7881732	5·5969676
75	4·7657800	5·5574011	75	4·7549977	5·5462460	75	4·7441316	5·5350007
76	4·7185611	5·4920023	76	4·7077788	5·4808643	76	4·6969127	5·4696374
77	4·6679203	5·4229934	77	4·6571380	5·4118728	77	4·6462719	5·4006628
78	4·6136017	5·3501504	78	4·6028194	5·3390456	78	4·5919533	5·3278528
79	4·5553388	5·2732365	79	4·5445565	5·2621479	79	4·5336904	5·2509708
80	4·4928540	5·1920060	80	4·4820717	5·1809324	80	4·4712056	5·1697712
81	4·4258588	5·1062004	81	4·4150765	5·0951415	81	4·4042104	5·0839951
82	4·3540537	5·0155518	82	4·3432714	5·0045058	82	4·3324053	4·9933736
83	4·2771284	4·9197766	83	4·2663461	4·9087455	83	4·2554800	4·8976266
84	4·1947614	4·8185855	84	4·1839791	4·8075662	84	4·1731130	4·7964612
85	4·1066207	4·7116723	85	4·0958384	4·7006657	85	4·0849723	4·6895725
86	4·0123628	4·5987216	86	4·0015805	4·5877267	86	3·9907144	4·5766453
87	3·9116337	4·4794038	87	3·9008514	4·4684199	87	3·8899853	4·4573504
88	3·8040683	4·3533791	88	3·7932860	4·3424059	88	3·7824199	4·3313471
89	3·6892905	4·2202930	89	3·6785082	4·2093305	89	3·6676421	4·1982823
90	3·5669134	4·0797798	90	3·5561311	4·0688268	90	3·5452650	4·0577889
91	3·4365391	3·9314584	91	3·4257568	3·9205151	91	3·4148907	3·9094865
92	3·2977587	3·7749343	92	3·2869764	3·7639997	92	3·2761103	3·7529806
93	3·1501525	3·6097960	93	3·1393702	3·5988704	93	3·1285041	3·5878590
94	2·9932896	3·4356129	94	2·9825073	3·4246955	94	2·9716412	3·4136935
95	2·8267284	3·2519279	95	2·8159461	3·2410179	95	2·8050800	3·2300242
96	2·6500164	3·0582472	96	2·6392341	3·0473458	96	2·6283680	3·0363590
97	2·4626899	2·8540205	97	2·4519076	2·8431262	97	2·4410415	2·8321479
98	2·2642746	2·6385961	98	2·2534923	2·6277089	98	2·2426262	2·6167380
99	2·0542848	2·4111330	99	2·0435025	2·4002564	99	2·0326364	2·3892920
100	1·8322243	2·1704269	100	1·8214420	2·1595576	100	1·8105759	2·1486046
101	1·5975858	1·9144965	101	1·5868035	1·9036374	101	1·5759374	1·8926939
102	1·3498510	1·6396339	102	1·3390687	1·6287873	102	1·3282026	1·6178566
103	1·0884907	1·3378884	103	1·0777084	1·3270584	103	1·0668423	1·3161424
104	0·8129649	0·9890581	104	0·8021826	0·9782490	104	0·7913165	0·9673561
105	0·5227223		105	0·5119400		105	0·5010739	
106	0·2172011		106	0·2064188		106	0·1955527	
107	9·8958282		107	9·8850459		107	9·8741798	
108	9·5580198		108	9·5472375		108	9·5363714	
109	9·2031810		109	9·1923987		109	9·1815326	

JOINT LIVES:—Two Females.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	30			31			32	
Age of (x)	λ $D_{x,30}$	λ $N_{x,30}$	Age of (x)	λ $D_{x,31}$	λ $N_{x,31}$	Age of (x)	λ $D_{x,32}$	λ $N_{x,32}$
0	5·9720347	7·1322165	0	5·9610008	7·1176394	0	5·9498820	7·1028393
1	5·9027765	7·1157097	1	5·8917426	7·1010941	1	5·8806238	7·0862526
2	5·8685989	7·1028855	2	5·8575650	7·0882623	2	5·8464462	7·0734119
3	5·8465357	7·0914144	3	5·8355018	7·0767955	3	5·8243830	7·0619491
4	5·8294881	7·0805796	4	5·8184542	7·0659717	4	5·8073354	7·0511355
5	5·8153217	7·0701011	5	5·8042878	7·0555087	5	5·7931690	7·0406874
6	5·8030982	7·0598227	6	5·7920643	7·0452486	6	5·7809455	7·0304456
7	5·7920724	7·0496374	7	5·7810385	7·0350841	7	5·7699197	7·0203020
8	5·7816929	7·0394788	8	5·7706590	7·0249485	8	5·7595402	7·0101884
9	5·7719238	7·0293087	9	5·7608899	7·0148026	9	5·7497711	7·0000669
10	5·7626214	7·0190889	10	5·7515875	7·0046090	10	5·7404687	6·9898988
11	5·7536542	7·0087878	11	5·7426203	6·9943354	11	5·7315015	6·9796526
12	5·7449029	6·9983797	12	5·7338690	6·9839562	12	5·7227502	6·9693017
13	5·7362607	6·9878439	13	5·7252268	6·9734502	13	5·7141080	6·9588256
14	5·7276328	6·9771642	14	5·7165989	6·9628022	14	5·7054801	6·9482084
15	5·7189366	6·9663297	15	5·7079027	6·9520005	15	5·6967839	6·9374392
16	5·7101018	6·9553330	16	5·6990679	6·9410381	16	5·6879491	6·9265106
17	5·7010704	6·9441703	17	5·6900365	6·9299113	17	5·6789177	6·9154192
18	5·6917966	6·9328414	18	5·6807627	6·9186200	18	5·6696439	6·9041648
19	5·6822467	6·9213482	19	5·6712128	6·9071662	19	5·6600940	6·8927500
20	5·6723993	6·9096952	20	5·6613654	6·8955543	20	5·6502466	6·8811790
21	5·6622453	6·8978880	21	5·6512114	6·8837906	21	5·6400926	6·8694581
22	5·6519937	6·8859336	22	5·6409598	6·8718817	22	5·6298410	6·8575945
23	5·6416481	6·8738261	23	5·6306142	6·8598219	23	5·6194954	6·8455823
24	5·6312111	6·8615592	24	5·6201772	6·8476050	24	5·6090584	6·8334153
25	5·6206854	6·8491261	25	5·6096515	6·8352240	25	5·5985327	6·8210865
26	5·6100727	6·8365190	26	5·5990388	6·8226714	26	5·5879200	6·8085884
27	5·5993747	6·8237298	27	5·5883408	6·8099387	27	5·5772220	6·7959128
28	5·5885924	6·8107501	28	5·5775585	6·7970171	28	5·5664397	6·7830506
29	5·5777263	6·7975702	29	5·5666924	6·7838976	29	5·5555736	6·7699920
30	5·5667764	6·7841804	30	5·5557425	6·7705698	30	5·5446237	6·7567275
31	5·5557425	6·7705698	31	5·5447086	6·7570230	31	5·5335898	6·7432457
32	5·5446237	6·7567275	32	5·5335898	6·7432457	32	5·5224710	6·7295351
33	5·5334186	6·7426413	33	5·5223847	6·7292258	33	5·5112659	6·7155835
34	5·5221255	6·7282991	34	5·5110916	6·7149505	34	5·4999728	6·7013779
35	5·5107421	6·7136870	35	5·4997082	6·7004069	35	5·4885894	6·6869045
36	5·4992656	6·6987911	36	5·4882317	6·6855798	36	5·4771129	6·6721492
37	5·4876930	6·6835966	37	5·4766591	6·6704543	37	5·4655403	6·6570959
38	5·4760205	6·6680875	38	5·4649866	6·6550146	38	5·4538678	6·6417283
39	5·4642440	6·6522470	39	5·4532101	6·6392432	39	5·4420913	6·6260298
40	5·4523590	6·6360574	40	5·4413251	6·6231223	40	5·4302063	6·6099815
41	5·4403603	6·6194988	41	5·4293264	6·6066325	41	5·4182076	6·5935638
42	5·4282424	6·6025514	42	5·4172085	6·5897526	42	5·4060897	6·5767560
43	5·4159993	6·5851925	43	5·4049654	6·5724606	43	5·3938466	6·5595348
44	5·4036246	6·5673983	44	5·3925907	6·5547324	44	5·3814719	6·5418768
45	5·3911112	6·5491431	45	5·3800773	6·5365418	45	5·3689585	6·5237553
46	5·3784519	6·5303992	46	5·3674180	6·5178607	46	5·3562992	6·5051421
47	5·3656387	6·5111352	47	5·3546048	6·4986590	47	5·3434860	6·4860062
48	5·3526633	6·4913182	48	5·3416294	6·4789018	48	5·3305106	6·4663144
49	5·3395168	6·4709116	49	5·3284829	6·4585532	49	5·3173641	6·4460283
50	5·3261901	6·4498736	50	5·3151562	6·4375725	50	5·3040374	6·4251084
51	5·3126733	6·4281601	51	5·3016394	6·4159134	51	5·2905206	6·4035092
52	5·2989562	6·4057197	52	5·2879223	6·3935265	52	5·2768035	6·3811788
53	5·2850281	6·3824972	53	5·2739942	6·3703539	53	5·2628754	6·3580621
54	5·2708780	6·3584277	54	5·2598441	6·3463336	54	5·2487253	6·3340939

JOINT LIVES:—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	30			31			32	
Age of (x)	$\lambda\ D_{x,\,30}$	$\lambda\ N_{x,\,30}$	Age of (x)	$\lambda\ D_{x,\,31}$	$\lambda\ N_{x,\,31}$	Age of (x)	$\lambda\ D_{x,\,32}$	$\lambda\ N_{x,\,32}$
55	5·2558309	6·3334392	55	5·2447970	6·3213919	55	5·2336782	6·3092034
56	5·2402042	6·3075092	56	5·2291703	6·2955073	56	5·2180515	6.2833675
57	5·2239720	6·2805836	57	5·2129381	6·2686248	57	5·2018193	6·2565320
58	5·2070973	6·2526028	58	5·1960634	6·2406840	58	5·1849446	6·2286360
59	5·1895324	6·2234977	59	5·1784985	6·2116191	59	5·1673797	6·1996129
60	5·1712185	6·1931964	60	5·1601846	6·1813553	60	5·1490658	6·1693905
61	5·1520857	6·1616186	61	5·1410518	6·1498137	61	5·1299330	6·1378878
62	5·1320536	6·1286781	62	5·1210197	6·1169075	62	5·1099009	6·1050191
63	5·1110305	6·0942810	63	5·0999966	6·0825438	63	5·0888778	6·0706905
64	5·0889138	6·0583277	64	5·0778799	6·0466220	64	5·0667611	6·0348028
65	5·0655902	6·0207101	65	5·0545563	6·0090346	65	5·0434375	5·9972483
66	5·0409351	5·9813129	66	5·0299012	5·9696670	66	5·0187824	5·9579117
67	5·0148132	5·9400147	67	5·0037793	5·9283959	67	4·9926605	5·9166704
68	4·9870783	5·8966827	68	4·9760444	5·8850911	68	4·9649256	5·8733940
69	4·9575730	5·8511792	69	4·9465391	5·8396135	69	4·9354203	5·8279436
70	4·9261293	5·8033566	70	4·9150954	5·7918154	70	4·9039766	5·7801716
71	4·8925680	5·7530581	71	4·8815341	5·7415409	71	4·8704153	5·7299222
72	4·8566990	5·7001191	72	4·8456651	5·6886244	72	4·8345463	5·6770298
73	4·8183214	5·6443648	73	4·8072875	5·6328920	73	4·7961687	5·6213201
74	4·7772233	5·5856107	74	4·7661894	5·5741593	74	4·7550706	5·5626094
75	4·7331817	5·5236637	75	4·7221478	5·5122321	75	4·7110290	5·5007037
76	4·6859628	5·4583189	76	4·6749289	5·4469072	76	4·6638101	5·4353987
77	4·6353220	5·3893626	77	4·6242881	5·3779693	77	4·6131693	5·3664807
78	4·5810034	5·3165694	78	4·5699695	5·3051944	78	4·5588507	5·2937239
79	4·5227105	5·2397046	79	4·5117066	5·2283460	79	4·5005878	5·2168942
80	4·4602557	5·1585202	80	4·4492218	5·1471790	80	4·4381030	5·1357431
81	4·3932605	5·0727600	81	4·3822266	5·0614337	81	4·3711078	5·0500154
82	4·3214554	4·9821532	82	4·3104215	4·9708427	82	4·2993027	4·9594392
83	4·2445301	4·8864196	83	4·2334962	4·8751238	83	4·2223774	4·8637362
84	4·1621631	4·7852679	84	4·1511292	4·7739853	84	4·1400104	4·7626119
85	4·0740224	4·6783927	85	4·0629885	4·6671231	85	4·0518697	4·6557635
86	3·9797645	4·5654773	86	3·9687306	4·5542208	86	3·9576118	4·5428740
87	3·8790354	4·4461943	87	3·8680015	4·4349498	87	3·8568827	4·4236153
88	3·7714700	4·3202022	88	3·7604361	4·3089693	88	3·7493173	4·2976467
89	3·6566922	4·1871478	89	3·6456583	4·1759259	89	3·6345395	4·1646146
90	3·5343151	4·0466645	90	3·5232812	4·0354530	90	3·5121624	4·0241527
91	3·4039408	3·8983725	91	3·3929069	3·8871704	91	3·3817881	3·8758805
92	3·2651604	3·7418753	92	3·2541265	3·7306846	92	3·2430077	3·7194034
93	3·1175542	3·5767640	93	3·1065203	3·5655810	93	3·0954015	3·5543110
94	2·9606913	3·4026057	94	2·9496574	3·3914318	94	2·9385386	3·3801698
95	2·7941301	3·2189452	95	2·7830962	3·2077795	95	2·7719774	3·1965263
96	2·6174181	3·0252883	96	2·6063842	3·0141315	96	2·5952654	3·0028863
97	2·4300916	2·8210843	97	2·4190577	2·8099359	97	2·4079389	2·7986997
98	2·2316763	2·6056832	98	2·2206424	2·5945417	98	2·2095236	2·5833145
99	2·0216865	2·3782452	99	2·0106526	2·3671135	99	1·9995338	2·3558940
100	1·7996260	2·1375664	100	1·7885921	2·1264428	100	1·7774733	2·1152333
101	1·5649875	1·8816671	101	1·5539536	1·8705543	101	1·5428348	1·8593545
102	1·3172527	1·6068402	102	1·3062188	1·5957420	102	1·2951000	1·5845563
103	1·0558924	1·3051449	103	1·0448585	1·2940582	103	1·0337397	1·2828916
104	0·7803666	0·9563750	104	0·7693327	0·9453159	104	0·7582139	0·9341650
105	0·4901240		105	0·4790901		105	0·4679713	
106	0·1846028		106	0·1735689		106	0·1624501	
107	9·8632299		107	9·8521960		107	9·8410772	
108	9·5254215		108	9·5143876		108	9·5032688	
109	9·1705827		109	9·1595488		109	9·1484300	

JOINT LIVES:—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	33		34			35		
Age of (x)	λ $D_{x,\,33}$	λ $N_{x,\,33}$	Age of (x)	λ $D_{x,\,34}$	λ $N_{x,\,34}$	Age of (x)	λ $D_{x,\,35}$	λ $N_{x,\,35}$
0	5·9386769	7·0878063	0	5·9273838	7·0725297	0	5·9160004	7·0569973
1	5·8694187	7·0711755	1	5·8581256	7·0558517	1	5·8467422	7·0402692
2	5·8352411	7·0583243	2	5·8239180	7·0429888	2	5·8125646	7·0273933
3	5·8131779	7·0468645	3	5·8018848	7·0315308	3	5·7905014	7·0159366
4	5·7961303	7·0360609	4	5·7848372	7·0207370	4	5·7734538	7·0051518
5	5·7819639	7·0256274	5	5·7706708	7·0103179	5	5·7592874	6·9947460
6	5·7697404	7·0154034	6	5·7584473	7·0001112	6	5·7470639	6·9845573
7	5·7587146	7·0052801	7	5·7474215	6·9900078	7	5·7360381	6·9744737
8	5·7483351	6·9951888	8	5·7370420	6·9799388	8	5·7256586	6·9644262
9	5·7385660	6·9850913	9	5·7272729	6·9698650	9	5·7158895	6·9543760
10	5·7292636	6·9749486	10	5·7179705	6·9597475	10	5·7065871	6·9442838
11	5·7202964	6·9647291	11	5·7090033	6·9495545	11	5·6976199	6·9341169
12	5·7115451	6·9544063	12	5·7002520	6·9392594	12	5·6888686	6·9238492
13	5·7029029	6·9439596	13	5·6916098	6·9288416	13	5·6802264	6·9134598
14	5·6942750	6·9333731	14	5·6829819	6·9182852	14	5·6715985	6·9029331
15	5·6855788	6·9226356	15	5·6742857	6·9075791	15	5·6629023	6·8922578
16	5·6767440	6·9117403	16	5·6654509	6·8967163	16	5·6540675	6·8814272
17	5·6677126	6·9006837	17	5·6564195	6·8856940	17	5·6450361	6·8704383
18	5·6584388	6·8894658	18	5·6471457	6·8745119	18	5·6357623	6·8592915
19	5·6488889	6·8980891	19	5·6375958	6·8631729	19	5·6262124	6·8479896
20	5·6390415	6·8665586	20	5·6277484	6·8516820	20	5·6163650	6·8365377
21	5·6288875	6·8548803	21	5·6175944	6·8400457	21	5·6062110	6·8249427
22	5·6186359	6·8430614	22	5·6073428	6·8282713	22	5·5959594	6·8132120
23	5·6082903	6·8310966	23	5·5969972	6·8163532	23	5·5856138	6·8013404
24	5·5978533	6·8189793	24	5·5865602	6·8042854	24	5·5751768	6·7893214
25	5·5873276	6·8067028	25	5·5760345	6·7920609	25	5·5646511	6·7771487
26	5·5767149	6·7942594	26	5·5654218	6·7796722	26	5·5540384	6·7648145
27	5·5660169	6·7816409	27	5·5547238	6·7671111	27	5·5433404	6.7523106
28	5·5552346	6·7688383	28	5·5439115	6·7543684	28	5·5325581	6·7396279
29	5·5443685	6·7558420	29	5·5330754	6·7414346	29	5·5216920	6·7267569
30	5·5334186	6·7426413	30	5·5221255	6·7282991	30	5·5107421	6·7136870
31	5·5223847	6·7292258	31	5·5110916	6·7149505	31	5·4997082	6·7004069
32	5·5112659	6·7155835	32	5·4999728	6·7013779	32	5·4885894	6·6869045
33	5·5000608	6·7017019	33	5·4887677	6·6875679	33	5·4773843	6·6731676
34	5·4887677	6·6875679	34	5·4774746	6·6735073	34	5·4660912	6·6591822
35	5·4773843	6·6731676	35	5·4660912	6·6591822	35	5·4547078	6·6449341
36	5·4659078	6·6584860	36	5·4546147	6·6445773	36	5·4432313	6·6304081
37	5·4543352	6·6435080	37	5·4430421	6·6296768	37	5·4316587	6·6155882
38	5·4426627	6·6282164	38	5·4313696	6·6144643	38	5·4199862	6·6004569
39	5·4308862	6·6125936	39	5·4195931	6·5989213	39	5·4082097	6·5849970
40	5·4190012	6·5966219	40	5·4077081	6·5830289	40	5·3963247	6·5691884
41	5·4070025	6·5802803	41	5·3957094	6·5667676	41	5·3843260	6·5530105
42	5·3948846	6·5635480	42	5·3835915	6·5501152	42	5·3722081	6·5364427
43	5·3826415	6·5464026	43	5·3713184	6·5330494	43	5·3599650	6·5194606
44	5·3702668	6·5288187	44	5·3589737	6·5155451	44	5·3475903	6·5020398
45	5·3577534	6·5107710	45	5·3464603	6·4975752	45	5·3350769	6·4841534
46	5·3450941	6·4922304	46	5·3338010	6·4791118	46	5·3224176	6·4657718
47	5·3322809	6·4731655	47	5·3209878	6·4601233	47	5·3096044	6·4468641
48	5·3193055	6·4535428	48	5·3080124	6·4405749	48	5·2966290	6·4273960
49	5·3061590	6·4333252	49	5·2948659	6·4204298	49	5·2834825	6·4073289
50	5·2928323	6·4124708	50	5·2815392	6·3996470	50	5·2701558	6·3866222
51	5·2793155	6·3909349	51	5·2680224	6·3781800	51	5·2566390	6·3652302
52	5·2655984	6·3686674	52	5·2543053	6·3559787	52	5·2429219	6·3431008
53	5·2516703	6·3456098	53	5·2403772	6·3329867	53	5·2289938	6·3201781
54	5·2375202	6·3216998	54	5·2262271	6·3091383	54	5·2148437	6·2963986

JOINT LIVES :—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	33			34			35	
Age of (x)	λ $D_{x,\,33}$	λ $N_{x,\,33}$	Age of (x)	λ $D_{x,\,34}$	λ $N_{x,\,34}$	Age of (x)	λ $D_{x,\,35}$	λ $N_{x,\,35}$
55	5·2224731	6·2968635	55	5·2111800	6·2843626	55	5·1997966	6·2716874
56	5·2068464	6·2710808	56	5·1955533	6·2586368	56	5·1841699	6·2460247
57	5·1906142	6·2442962	57	5·1793211	6·2319075	57	5·1679377	6·2193547
58	5·1737395	6·2164491	58	5·1624464	6·2041134	58	5·1510630	6·1916184
59	5·1561746	6·1874724	59	5·1448815	6·1751879	59	5·1334981	6·1627481
60	5·1378607	6·1572935	60	5·1265676	6·1450574	60	5·1151842	6·1326707
61	5·1187279	6·1258338	61	5·1074348	6·1136426	61	5·0960514	6·1013067
62	5·0986958	6·0930054	62	5·0874027	6·0808587	62	5·0760193	6·0685695
63	5·0776727	6·0587155	63	5·0663796	6·0466110	63	5·0549962	6·0343682
64	5·0555560	6·0228645	64	5·0442629	6·0107997	64	5·0328795	5·9986006
65	5·0322324	5·9853447	65	5·0209393	5·9733181	65	5·0095559	5·9611600
66	5·0075773	5·9460419	66	4·9962842	5·9340509	66	4·9849008	5·9219320
67	4·9814554	5·9048324	67	4·9701623	5·8928759	67	4·9587789	5·8807942
68	4·9537205	5·8615865	68	4·9424274	5·8496628	68	4·9310440	5·8376163
69	4·9242152	5·8161650	69	4·9129221	5·8042725	69	4·9015387	5·7922599
70	4·8927715	5·7684208	70	4·8814784	5·7565579	70	4·8700950	5·7445772
71	4·8592102	5·7181979	71	4·8479171	5·7063633	71	4·8365337	5·6944129
72	4·8233412	5·6653311	72	4·8120481	5·6535234	72	4·8006647	5·6416019
73	4·7849636	5·6096459	73	4·7736705	5·5978641	73	4·7622871	5·5859700
74	4·7438655	5·5509580	74	4·7325724	5·5392012	74	4·7211890	5·5273331
75	4·6998239	5·4890745	75	4·6885308	5·4773405	75	4·6771474	5·4654980
76	4·6526050	5·4237910	76	4·6413119	5·4120795	76	4·6299285	5·4002599
77	4·6019642	5·3548930	77	4·5906711	5·3432032	77	4·5792877	5·3314062
78	4·5476456	5·2821563	78	4·5363525	5·2704864	78	4·5249691	5·2587115
79	4·4893827	5·2053443	79	4·4780896	5·1936949	79	4·4667062	5·1819399
80	4·4268979	5·1242123	80	4·4156048	5·1125802	80	4·4042214	5·1008459
81	4·3599027	5·0385001	81	4·3486096	5·0268874	81	4·3372262	5·0151703
82	4·2880976	4·9479412	82	4·2768045	4·9363443	82	4·2654211	4·9246462
83	4·2111723	4·8522530	83	4·1998792	4·8406731	83	4·1884958	4·8289910
84	4·1288053	4·7511444	84	4·1175122	4·7395795	84	4·1061288	4·7279144
85	4·0406646	4·6443095	85	4·0293715	4·6327599	85	4·0179881	4·6211097
86	3·9464067	4·5314339	86	3·9351136	4·5198979	86	3·9237302	4·5082630
87	3·8456776	4·4121885	87	3·8343845	4·4006659	87	3·8230011	4·3890445
88	3·7381122	4·2862319	88	3·7268191	4·2747225	88	3·7154357	4·2631146
89	3·6233344	4·1532116	89	3·6120413	4·1417140	89	3·6006579	4·1301192
90	3·5009573	4·0127605	90	3·4896642	4·0012749	90	3·4782808	3·9896914
91	3·3705830	3·8644992	91	3·3592899	3·8530237	91	3·3479065	3·8414527
92	3·2318026	3·7080324	92	3·2205095	3·6965678	92	3·2091261	3·6850068
93	3·0841964	3·5429486	93	3·0729033	3·5314943	93	3·0615199	3·5199448
94	2·9273335	3·3688178	94	2·9160404	3·3573732	94	2·9046570	3·3458331
95	2·7607723	3·1851831	95	2·7494792	3·1737478	95	2·7380958	3·1622172
96	2·5840603	2·9915521	96	2·5727672	2·9801257	96	2·5613838	2·9686048
97	2·3967338	2·7873733	97	2·3854407	2·7759562	97	2·3740573	2·7644444
98	2·1983185	2·5719975	98	2·1870254	2·5605880	98	2·1756420	2·5490867
99	1·9883287	2·3445860	99	1·9770356	2·3331870	99	1·9656522	2·3216941
100	1·7662682	2·1039351	100	1·7549751	2·0925459	100	1·7435917	2·0810638
101	1·5316297	1·8480678	101	1·5203366	1·8366898	101	1·5089532	1·8252196
102	1·2838949	1·5732813	102	1·2726018	1·5619179	102	1·2612184	1·5504607
103	1·0225346	1·2716348	103	1·0112415	1·2602861	103	0·9998581	1·2488484
104	0·7470088	0·9229330	104	0·7357157	0·9116103	104	0·7243323	0·9001923
105	0·4567662		105	0·4454731		105	0·4340897	
106	0·1512450		106	0·1399519		106	0·1285685	
107	9·8298721		107	9·8185790		107	9·8071956	
108	9·4920637		108	9·4807706		108	9·4693872	
109	9·1372249		109	9·1259318		109	9·1145484	

JOINT LIVES:—Two Females.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	36		37			38		
Age of (x)	$\lambda\ D_{x,36}$	$\lambda\ N_{x,36}$	Age of (x)	$\lambda\ D_{x,37}$	$\lambda\ N_{x,37}$	Age of (x)	$\lambda\ D_{x,38}$	$\lambda\ N_{x,38}$
0	5·9045239	7·0411976	0	5·8929513	7·0251174	0	5·8812788	7·0087411
1	5·8352657	7·0244155	1	5·8236931	7·0082773	1	5·8120206	6·9918397
2	5·8010881	7·0115249	2	5·7895155	6·9953702	2	5·7778430	6·9789143
3	5·7790249	7·0000691	3	5·7674523	6·9839141	3	5·7557798	6·9674570
4	5·7619773	6·9892925	4	5·7504047	6·9731456	4	5·7387322	6·9566958
5	5·7478109	6·9789009	5	5·7362383	6·9627671	5	5·7245658	6·9463303
6	5·7355874	6·9687288	6	5·7240148	6·9526119	6	5·7123423	6·9361919
7	5·7245616	6·9586649	7	5·7129890	6·9425677	7	5·7013165	6·9261671
8	5·7141821	6·9486392	8	5·7026095	6·9325634	8	5·6909370	6·9161842
9	5·7044130	6·9386120	9	5·6928404	6·9225596	9	5·6811679	6·9062034
10	5·6951106	6·9285445	10	5·6835380	6·9125163	10	5·6718655	6·8961850
11	5·6861434	6·9184038	11	5·6745708	6·9024015	11	5·6628983	6·8860953
12	5·6773921	6·9081632	12	5·6658195	6·8921879	12	5·6541470	6·8759084
13	5·6687499	6·8978020	13	5·6571773	6·8818544	13	5·6455048	6·8656027
14	5·6601220	6·8873043	14	5·6485494	6·8713855	14	5·6368769	6·8551621
15	5·6514258	6·8766594	15	5·6398532	6·8607703	15	5·6281807	6·8445764
16	5·6425910	6·8658604	16	5·6310184	6·8500024	16	5·6193459	6·8338386
17	5·6335596	6·8549046	17	5·6219870	6·8390788	17	5·6103145	6·8229468
18	5·6242858	6·8437921	18	5·6127132	6·8280002	18	5·6010407	6·8119012
19	5·6147359	6·8325265	19	5·6031633	6·8167699	19	5·5914908	6·8007058
20	5·6048885	6·8211129	20	5·5933159	6·8053940	20	5·5816434	6·7893664
21	5·5947345	6·8095583	21	5·5831619	6·7938791	21	5·5714894	6·7778907
22	5·5844829	6·7978707	22	5·5729103	6·7822339	22	5·5612378	6·7662868
23	5·5741373	6·7860449	23	5·5625647	6·7704528	23	5·5508922	6·7545499
24	5·5637003	6·7740745	24	5·5521277	6·7585303	24	5·5404552	6·7426742
25	5·5531746	6·7619529	25	5·5416020	6·7464596	25	5·5299295	6·7306533
26	5·5425619	6·7496729	26	5·5309893	6·7342330	26	5·5193168	6·7184800
27	5·5318639	6·7372259	27	5·5202913	6·7218429	27	5·5086188	6·7061457
28	5·5210816	6·7246033	28	5·5095090	6·7092798	28	5·4978365	6·6936423
29	5·5102155	6·7117952	29	5·4986429	6·6965346	29	5·4869704	6·6809596
30	5·4992656	6·6987911	30	5·4876930	6·6835966	30	5·4760205	6·6680875
31	5·4882317	6·6855796	31	5·4766591	6·6704543	31	5·4649866	6·6550146
32	5·4771129	6·6721492	32	5·4655403	6·6570959	32	5·4538678	6·6417283
33	5·4659078	6·6584860	33	5·4543352	6·6435080	33	5·4426627	6·6282164
34	5·4546147	6·6445773	34	5·4430421	6·6296768	34	5·4313696	6·6144643
35	5·4432313	6·6304081	35	5·4316587	6·6155882	35	5·4199862	6·6004569
36	5·4317548	6·6159632	36	5·4201822	6·6012261	36	5·4085097	6·5861795
37	5·4201822	6·6012261	37	5·4086096	6·5865740	37	5·3969371	6·5716145
38	5·4085097	6·5861795	38	5·3969371	6·5716145	38	5·3852646	6·5567443
39	5·3967332	6·5708050	39	5·3851606	6·5563288	39	5·3734881	6·5415501
40	5·3848482	6·5550835	40	5·3732756	6·5406972	40	5·3616031	6·5260117
41	5·3728495	6·5389936	41	5·3612769	6·5246989	41	5·3496044	6·5101079
42	5·3607316	6·5225133	42	5·3491590	6·5083112	42	5·3374865	6·4938165
43	5·3484885	6·5056200	43	5·3369159	6·4915098	43	5·3252434	6·4771124
44	5·3361138	6·4882873	44	5·3245412	6·4742704	44	5·3128687	6·4599695
45	5·3236004	6·4704887	45	5·3120278	6·4565643	45	5·3003553	6·4423614
46	5·3109411	6·4521948	46	5·2993685	6·4383625	46	5·2876960	6·4242571
47	5·2981279	6·4333729	47	5·2865553	6·4196328	47	5·2748828	6·4056241
48	5·2851525	6·4139897	48	5·2735799	6·4003398	48	5·2619074	6·3864278
49	5·2720060	6·3940069	49	5·2604334	6·3804461	49	5·2487609	6·3666288
50	5·2586793	6·3733819	50	5·2471067	6·3599094	50	5·2354342	6·3461859
51	5·2451625	6·3520696	51	5·2335899	6·3386830	51	5·2219174	6·3250521
52	5·2314454	6·3300191	52	5·2198728	6·3167160	52	5·2082003	6·3031752
53	5·2175173	6·3071718	53	5·2059447	6·2939512	53	5·1942722	6·2804980
54	5·2033672	6·2834645	54	5·1917946	6·2703229	54	5·1801221	6·2569560

JOINT LIVES:—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	36			37			38	
Age of (x)	$\lambda\ D_{x,\,36}$	$\lambda\ N_{x,\,36}$	Age of (x)	$\lambda\ D_{x,\,37}$	$\lambda\ N_{x,\,37}$	Age of (x)	$\lambda\ D_{x,\,38}$	$\lambda\ N_{x,\,38}$
55	5·1883201	6·2588252	55	5·1767475	6·2457591	55	5·1650750	6·2324749
56	5·1726934	6·2332300	56	5·1611208	6·2202392	56	5·1494483	6·2070340
57	5·1564612	6·2066262	57	5·1448886	6·1937060	57	5·1332161	6·1805798
58	5·1395865	6·1789520	58	5·1280139	6·1661011	58	5·1163414	6·1530490
59	5·1220216	6·1501419	59	5·1104490	6·1373560	59	5·0987765	6·1243764
60	5·1037077	6·1201223	60	5·0921351	6·1073993	60	5·0804626	6·0944879
61	5·0845749	6·0888134	61	5·0730023	6·0761509	61	5·0613298	6·0633052
62	5·0645428	6·0561293	62	5·0529702	6·0435242	62	5·0412977	6·0307418
63	5·0435197	6·0219766	63	5·0319471	6·0094267	63	5·0202746	5·9967043
64	5·0214030	5·9862570	64	5·0098304	5·9737581	64	4·9981579	5·9610932
65	4·9980794	5·9488615	65	4·9865068	5·9364126	65	4·9748343	5·9238015
66	4·9734243	5·9096764	66	4·9618517	5·8972744	66	4·9501792	5·8847149
67	4·9473024	5·8685793	67	4·9357298	5·8562217	67	4·9240573	5·8437111
68	4·9195675	5·8254399	68	4·9079949	5·8131244	68	4·8963224	5·8006597
69	4·8900622	5·7801196	69	4·8784896	5·7678439	69	4·8668171	5·7554231
70	4·8586185	5·7324719	70	4·8470459	5·7202336	70	4·8353734	5·7078539
71	4·8250572	5·6823403	71	4·8134846	5·6701379	71	4·8018121	5·6577967
72	4·7891882	5·6295602	72	4·7776156	5·6173915	72	4·7659431	5·6050874
73	4·7508106	5·5739578	73	4·7392380	5·5618208	73	4·7275655	5·5495513
74	4·7097125	5·5153491	74	4·6981399	5·5032421	74	4·6864674	5·4910051
75	4·6656709	5·4535404	75	4·6540983	5·4414622	75	4·6424258	5·4292560
76	4·6184520	5·3883280	76	4·6068794	5·3762769	76	4·5952069	5·3641001
77	4·5678112	5·3194976	77	4·5562386	5·3074727	77	4·5445661	5·2953233
78	4·5134926	5·2468259	78	4·5019200	5·2348244	78	4·4902475	5·2227019
79	4·4552297	5·1700762	79	4·4436571	5·1580982	79	4·4319846	5·1459993
80	4·3927449	5·0890024	80	4·3811723	5·0770461	80	4·3694998	5·0649714
81	4·3257497	5·0033477	81	4·3141771	4·9914118	81	4·3025046	4·9793585
82	4·2539446	4·9128409	82	4·2423720	4·9009262	82	4·2306995	4·8888935
83	4·1770193	4·8172043	83	4·1654467	4·8053071	83	4·1537742	4·7932958
84	4·0946523	4·7161436	84	4·0830797	4·7042647	84	4·0714072	4·6922713
85	4·0065116	4·6093564	85	3·9949390	4·5974937	85	3·9832665	4·5855182
86	3·9122537	4·4965243	86	3·9006811	4·4846784	86	3·8890086	4·4727199
87	3·8115246	4·3773211	87	3·7999520	4·3654901	87	3·7882795	4·3535480
88	3·7039592	4·2514044	88	3·6923866	4·2395888	88	3·6807141	4·2276613
89	3·5891814	4·1184225	89	3·5776088	4·1066199	89	3·5659363	4·0947079
90	3·4668043	3·9780078	90	3·4552317	3·9662187	90	3·4435592	3·9543197
91	3·3364300	3·8297803	91	3·3248574	3·8180047	91	3·3131849	3·8061189
92	3·1976496	3·6733463	92	3·1860770	3·6615817	92	3·1744045	3·6497096
93	3·0500434	3·5082940	93	3·0384708	3·4965408	93	3·0267983	3·4846798
94	2·8931805	3·3341937	94	2·8816079	3·3224514	94	2·8699354	3·3106018
95	2·7266193	3·1505882	95	2·7150467	3·1388564	95	2·7033742	3·1270180
96	2·5499073	2·9569849	96	2·5383347	2·9452637	96	2·5266622	2·9334357
97	2·3625808	2·7528348	97	2·3510082	2·7411225	97	2·3393357	2·7293057
98	2·1641655	2·5374867	98	2·1525929	2·5257857	98	2·1409204	2·5139776
99	1·9541757	2·3101042	99	1·9426031	2·2984133	99	1·9309306	2·2866177
100	1·7321152	2·0694846	100	1·7205426	2·0578053	100	1·7088701	2·0460213
101	1·4974767	1·8136531	101	1·4859041	1·8019865	101	1·4742316	1·7902169
102	1·2497419	1·5389091	102	1·2381693	1·5272586	102	1·2264968	1·5155042
103	0·9883816	1·2373150	103	0·9768090	1·2256840	103	0·9651365	1·2139505
104	0·7128558	0·8886848	104	0·7012832	0·8770775	104	0·6896107	0·8653705
105	0·4226132		105	0·4110406		105	0·3993681	
106	0·1170920		106	0·1055194		106	0·0938469	
107	9·7957191		107	9·7841465		107	9·7724740	
108	9·4579107		108	9·4463381		108	9·4346656	
109	9·1030719		109	9·0914993		109	9·0798268	

JOINT LIVES:—Two Females.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	42			43			44	
Age of (x)	$\lambda D_{x,42}$	$\lambda N_{x,42}$	Age of (x)	$\lambda D_{x,43}$	$\lambda N_{x,43}$	Age of (x)	$\lambda D_{x,44}$	$\lambda N_{x,44}$
0	5·8335007	6·9399556	0	5·8212576	6·9218453	0	5·8088829	6·9033266
1	5·7642425	6·9227609	1	5·7519994	6·9045637	1	5·7396247	6·8859514
2	5·7300649	6·9097418	2	5·7178218	6·8915148	2	5·7054471	6·8728701
3	5·7080017	6·8982679	3	5·6957586	6·8800335	3	5·6833839	6·8613798
4	5·6909541	6·8875302	4	5·6787110	6·8692997	4	5·6663363	6·8506490
5	5·6767877	6·8772131	5	5·6645446	6·8589939	5	5·6521699	6·8403537
6	5·6645642	6·8671403	6	5·6523211	6·8489371	6	5·6399464	6·8303127
7	5·6535384	6·8571926	7	5·6412953	6·8390084	7	5·6289206	6·8204034
8	5·6431589	6·8472954	8	5·6309158	6·8291329	8	5·6185411	6·8105492
9	5·6333898	6·8374070	9	5·6211467	6·8192678	9	5·6087720	6·8007077
10	5·6240874	6·8274861	10	5·6118443	6·8093714	10	5·5994696	6·7908361
11	5·6151202	6·8174985	11	5·6028771	6·7994092	11	5·5905024	6·7808996
12	5·6063689	6·8074163	12	5·5941258	6·7893533	12	5·5817511	6·7708699
13	5·5977267	6·7972183	13	5·5854836	6·7791821	13	5·5731089	6·7607253
14	5·5890988	6·7868883	14	5·5768557	6·7688792	14	5·5644810	6·7504496
15	5·5804026	6·7764159	15	5·5681595	6·7584343	15	5·5557848	6·7400319
16	5·5715678	6·7657952	16	5·5593247	6·7478413	16	5·5469500	6·7294667
17	5·5625364	6·7550239	17	5·5502933	6·7370988	17	5·5379186	6·7187521
18	5·5532626	6·7441035	18	5·5410195	6·7262085	18	5·5286448	6·7078908
19	5·5437127	6·7330392	19	5·5314696	6·7151749	19	5·5190949	6·6968878
20	5·5338653	6·7218378	20	5·5216222	6·7040061	20	5·5092475	6·6857504
21	5·5237113	6·7105086	21	5·5114682	6·6927110	21	5·4990935	6·6744888
22	5·5134597	6·6990612	22	5·5012166	6·6813002	22	5·4888419	6·6631134
23	5·5031141	6·6874913	23	5·4908710	6·6697693	23	5·4784963	6·6516207
24	5·4926771	6·6757937	24	5·4804340	6·6581140	24	5·4680593	6·6400059
25	5·4821514	6·6639633	25	5·4699083	6·6463281	25	5·4575336	6·6282640
26	5·4715387	6·6519932	26	5·4592956	6·6344058	26	5·4469209	6·6163883
27	5·4608407	6·6398752	27	5·4485976	6·6223399	27	5·4362229	6·6043724
28	5·4500584	6·6276021	28	5·4378153	6·6101214	28	5·4254406	6·5922085
29	5·4391923	6·6151643	29	5·4269492	6·5977425	29	5·4145745	6·5798865
30	5·4282424	6·6025514	30	5·4159993	6·5851925	30	5·4036246	6·5673983
31	5·4172085	6·5897526	31	5·4049654	6·5724606	31	5·3925907	6·5547324
32	5·4060897	6·5767560	32	5·3938466	6·5595348	32	5·3814719	6·5418768
33	5·3948846	6·5635480	33	5·3826415	6·5464026	33	5·3702668	6·5288187
34	5·3835915	6·5501152	34	5·3713484	6·5330494	34	5·3589737	6·5155451
35	5·3722081	6·5364427	35	5·3599650	6·5194606	35	5·3475903	6·5020398
36	5·3607316	6·5225133	36	5·3484885	6·5056200	36	5·3361138	6·4882873
37	5·3491590	6·5083112	37	5·3369159	6·4915098	37	5·3245412	6·4742704
38	5·3374865	6·4938165	38	5·3252434	6·4771124	38	5·3128687	6·4599695
39	5·3257100	6·4790096	39	5·3134669	6·4624067	39	5·3010922	6·4453662
40	5·3138250	6·4638703	40	5·3015819	6·4473717	40	5·2892072	6·4304376
41	5·3018263	6·4483757	41	5·2895832	6·4319855	41	5·2772085	6·4151610
42	5·2897084	6·4325019	42	5·2774653	6·4162234	42	5·2650906	6·3995130
43	5·2774653	6·4162234	43	5·2652222	6·4000596	43	5·2528475	6·3834667
44	5·2650906	6·3995130	44	5·2528475	6·3834667	44	5·2404728	6·3669942
45	5·2525772	6·3823411	45	5·2403341	6·3664146	45	5·2279594	6·3500657
46	5·2399179	6·3646769	46	5·2276748	6·3488718	46	5·2153001	6·3326487
47	5·2271047	6·3464856	47	5·2148616	6·3308041	47	5·2024869	6·3147087
48	5·2141293	6·3277303	48	5·2018862	6·3121736	48	5·1895115	6·2962080
49	5·2009828	6·3083721	49	5·1887397	6·2929398	49	5·1763650	6·2771054
50	5·1876561	6·2883666	50	5·1754130	6·2730594	50	5·1630383	6·2573557
51	5·1741393	6·2676656	51	5·1618962	6·2524833	51	5·1495215	6·2369113
52	5·1604222	6·2462166	52	5·1481791	6·2311580	52	5·1358044	6·2157172
53	5·1464941	6·2239596	53	5·1342510	6·2090242	53	5·1218763	6·1937130
54	5·1323440	6·2008286	54	5·1201009	6·1860148	54	5·1077262	6·1708327

JOINT LIVES :—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	42			43			44	
Age of (x)	$\lambda\ D_{x,\,42}$	$\lambda\ N_{x,\,42}$	**Age** of (x)	$\lambda\ D_{x,\,43}$	$\lambda\ N_{x,\,43}$	**Age** of (x)	$\lambda\ D_{x,\,44}$	$\lambda\ N_{x,\,44}$
55	5·1172969	6·1767500	55	5·1050538	6·1620545	55	5·0926791	6·1469998
56	5·1016702	6·1517005	56	5·0894271	6·1371227	56	5·0770524	6·1221923
57	5·0854380	6·1256257	57	5·0731949	6·1111620	57	5·0608202	6·0963552
58	5·0685633	6·0984642	58	5·0563202	6·0841125	58	5·0439455	6·0694254
59	5·0509984	6·0701480	59	5·0387553	6·0559051	59	5·0263806	6·0413359
60	5·0326845	6·0406043	60	5·0204414	6·0264671	60	5·0080667	6·0120121
61	5·0135517	6·0097534	61	5·0013086	5·9957181	61	4·9889339	5·9813741
62	4·9935196	5·9775074	62	4·9812765	5·9635713	62	4·9689018	5·9493349
63	4·9724965	5·9437747	63	4·9602534	5·9299339	63	4·9478787	5·9158013
64	4·9503798	5·9084548	64	4·9381367	5·8947055	64	4·9257620	5·8806731
65	4·9270562	5·8714408	65	4·9148131	5·8577790	65	4·9024384	5·8438428
66	4·9024011	5·8326181	66	4·8901580	5·8190401	66	4·8777833	5·8051961
67	4·8762792	5·7918650	67	4·8640361	5·7783666	67	4·8516614	5·7646108
68	4·8485443	5·7490515	68	4·8363012	5·7356291	68	4·8239265	5·7219570
69	4·8190390	5·7040391	69	4·8067959	5·6906893	69	4·7944212	5·6770971
70	4·7875953	5·6566823	70	4·7753522	5·6434003	70	4·7629775	5·6298844
71	4·7540340	5·6068253	71	4·7417909	5·5936080	71	4·7294162	5·5801634
72	4·7181650	5·5543042	72	4·7059219	5·5411476	72	4·6935472	5·5277709
73	4·6797874	5·4989454	73	4·6675443	5·4858460	73	4·6551696	5·4725334
74	4·6386893	5·4405657	74	4·6264462	5·4275205	74	4·6140715	5·4142679
75	4·5946477	5·3789728	75	4·5824046	5·3659778	75	4·5700299	5·3527822
76	4·5474288	5·3139642	76	4·5351857	5·3010159	76	4·5228110	5·2878729
77	4·4967880	5·2453254	77	4·4845449	5 2324221	77	4·4721702	5 2193280
78	4·4424694	5·1728329	78	4·4302263	5·1599709	78	4·4178516	5·1469242
79	4·3842065	5·0962529	79	4·3719634	5·0834291	79	4·3595887	5·0704254
80	4·3217217	5·0153388	80	4·3094786	5·0025514	80	4·2971039	4·9895877
81	4·2547265	4·9298336	81	4·2424834	4·9170799	81	4·2301087	4·9041543
82	4·1829214	4·8394699	82	4·1706783	4·8267471	82	4·1583036	4·8138564
83	4·1059961	4·7439658	83	4·0937530	4·7312736	83	4·0813783	4·7184153
84	4·0236291	4·6430320	84	4·0113860	4·6303658	84	3·9990113	4·6175387
85	3·9354884	4·5363627	85	3·9232453	4·5237231	85	3·9108706	4·5109240
86	3·8412305	4·4236438	86	3·8289874	4·4110279	86	3·8166127	4·3982555
87	3·7405014	4·3045468	87	3·7282583	4·2919535	87	3·7158836	4·2792058
88	3·6329360	4·1787312	88	3·6206929	4·1661592	88	3·6083182	4·1534347
89	3·5181582	4·0458446	89	3·5059151	4·0332922	89	3·4935404	4·0205892
90	3·3957811	3·9055202	90	3·3835380	3·8929868	90	3·3711633	3·8803041
91	3·2654068	3·7573801	91	3·2531637	3·7448630	91	3·2407890	3·7321991
92	3·1266264	3·6010262	92	3·1143833	3·5885283	92	3·1020086	3·5758815
93	2·9790202	3·4360524	93	2·9667771	3·4235686	93	2·9544024	3·4109400
94	2·8221573	3·2620256	94	2·8099142	3·2495571	94	2·7975395	3·2369441
95	2·6555961	3·0784917	95	2·6433530	3·0660370	95	2·6309783	3·0534396
96	2·4788841	2·8849578	96	2·4666410	2·8725169	96	2·4542663	2·8599341
97	2·2915576	2·6808756	97	2·2793145	2·6684483	97	2·2669398	2·6558795
98	2·0931423	2·4655955	98	2·0808992	2·4531822	98	2·0685245	2·4406274
99	1·8831525	2·2382846	99	1·8709094	2·2258846	99	1·8585347	2·2133454
100	1·6610920	1·9977423	100	1·6488489	1·9853573	100	1·6364742	1·9728335
101	1·4264535	1·7419973	101	1·4142104	1·7296313	101	1·4018357	1·7171252
102	1·1787187	1·4673595	102	1·1664756	1·4550125	102	1·1541009	1·4425299
103	0·9173584	1·1658999	103	0·9051153	1·1535771	103	0·8927406	1·1411204
104	0·6418326	0·8174398	104	0·6295895	0·8051541	104	0·6172148	0·7927278
105	0·3515900		105	0·3393469		105	0·3269722	
106	0·0460688		106	0·0338257		106	0·0214510	
107	9·7246959		107	9·7124528		107	9·7000781	
108	9·3868875		108	9·3746444		108	9·3622697	
109	9·0320487		109	9·0198056		109	9·0074309	

JOINT LIVES :—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	48		49			50		
Age of (x)	$\lambda\ D_{x,\,48}$	$\lambda\ N_{x,\,48}$	Age of (x)	$\lambda\ D_{x,\,49}$	$\lambda\ N_{x,\,49}$	Age of (x)	$\lambda\ D_{x,\,50}$	$\lambda\ N_{x,\,50}$
0	5·7579216	6·8246434	0	5·7447751	6·8036666	0	5·7314484	6·7820949
1	5·6886634	6·8068170	1	5·6755169	6·7857042	1	5·6621902	6·7639857
2	5·6544858	6·7935688	2	5·6413393	6·7724040	2	5·6280126	6·7506276
3	5·6324226	6·7820224	3	5·6192761	6·7608375	3	5·6059494	6·7390387
4	5·6153750	6·7712921	4	5·6022285	6·7501038	4	5·5889018	6·7282995
5	5·6012086	6·7610334	5	5·5880621	6·7398515	5	5·5747354	6·7180531
6	5·5889851	6·7510524	6	5·5758386	6·7298846	6	5·5625119	6·7080993
7	5·5779593	6·7412191	7	5·5648128	6·7200700	7	5·5514861	6·6983030
8	5·5675798	6·7314520	8	5·5544333	6·7103247	8	5·5411066	6·6885796
9	5·5578107	6·7217057	9	5·5446642	6·7006026	9	5·5313375	6·6788820
10	5·5485083	6·7119355	10	5·5353618	6·6908581	10	5·5220351	6·6691635
11	5·5395411	6·7021037	11	5·5263946	6·6810534	11	5·5130679	6·6593858
12	5·5307898	6·6921808	12	5·5176433	6·6711578	12	5·5043166	6·6495180
13	5·5221476	6·6821441	13	5·5090011	6·6611483	13	5·4956744	6·6395361
14	5·5135197	6·6719764	14	5·5003732	6·6510081	14	5·4870465	6·6294232
15	5·5048235	6·6616669	15	5·4916770	6·6407257	15	5·4783503	6·6191680
16	5·4959887	6·6512102	16	5·4828422	6·6302955	16	5·4695155	6·6087648
17	5·4869573	6·6406050	17	5·4738108	6·6197172	17	5·4604841	6·5982126
18	5·4776835	6·6298546	18	5·4645370	6·6089933	18	5·4512103	6·5875154
19	5·4681336	6·6189652	19	5·4549871	6·5981312	19	5·4416604	6·5766798
20	5·4582862	6·6079465	20	5·4451397	6·5871403	20	5·4318130	6·5657162
21	5·4481322	6·5968093	21	5·4349857	6·5760324	21	5·4216590	6·5546364
22	5·4378806	6·5855667	22	5·4247341	6·5648201	22	5·4114074	6·5434544
23	5·4275350	6·5742158	23	5·4143885	6·5535018	23	5·4010618	6·5321671
24	5·4170980	6·5627520	24	5·4039515	6·5420735	24	5·3906248	6·5207727
25	5·4065723	6·5511722	25	5·3934258	6·5305309	25	5·3800991	6·5092668
26	5·3959596	6·5394705	26	5·3828131	6·5188698	26	5·3694864	6·4976443
27	5·3852616	6·5276420	27	5·3721151	6·5070838	27	5·3587884	6·4859006
28	5·3744793	6·5156790	28	5·3613328	6·4951677	28	5·3480061	6·4740289
29	5·3636132	6·5035743	29	5·3504667	6·4831130	29	5·3371400	6·4620228
30	5·3526633	6·4913182	30	5·3395168	6·4709116	30	5·3261901	6·4498736
31	5·3416294	6·4789018	31	5·3284829	6·4585532	31	5·3151562	6·4375725
32	5·3305106	6·4663144	32	5·3173641	6·4460283	32	5·3040374	6·4251084
33	5·3193055	6·4535428	33	5·3061590	6·4333252	33	5·2928323	6·4124708
34	5·3080124	6·4405749	34	5·2948659	6·4204298	34	5·2815392	6·3996470
35	5·2966290	6·4273960	35	5·2834825	6·4073289	35	5·2701558	6·3866222
36	5·2851525	6·4139897	36	5·2720060	6·3940069	36	5·2586793	6·3733819
37	5·2735799	6·4003398	37	5·2604334	6·3804461	37	5·2471067	6·3599094
38	5·2619074	6·3864278	38	5·2487609	6·3666288	38	5·2354342	6·3461859
39	5·2501309	6·3722330	39	5·2369844	6·3525356	39	5·2236577	6·3321922
40	5·2382459	6·3577344	40	5·2250994	6·3381438	40	5·2117727	6·3179072
41	5·2262472	6·3429084	41	5·2131007	6·3234312	41	5·1997740	6·3033067
42	5·2141293	6·3277303	42	5·2009828	6·3083721	42	5·1876561	6·2883666
43	5·2018862	6·3121736	43	5·1887397	6·2929398	43	5·1754130	6·2730594
44	5·1895115	6·2962080	44	5·1763650	6·2771054	44	5·1630383	6·2573557
45	5·1769981	6·2798029	45	5·1638516	6·2608364	45	5·1505249	6·2412246
46	5·1643388	6·2629248	46	5·1511923	6·2440994	46	5·1378656	6·2246306
47	5·1515256	6·2455370	47	5·1383791	6·2268581	47	5·1250524	6·2075375
48	5·1385502	6·2276003	48	5·1254037	6·2090720	48	5·1120770	6·1899050
49	5·1254037	6·2090720	49	5·1122572	6·1906980	49	5·0989305	6·1716890
50	5·1120770	6·1899050	50	5·0989305	6·1716890	50	5·0856038	6·1528422
51	5·0985602	6·1700481	51	5·0854137	6·1519931	51	5·0720870	6·1333118
52	5·0848431	6·1494451	52	5·0716966	6·1315532	52	5·0583699	6·1130404
53	5·0709150	6·1280336	53	5·0577685	6·1103065	53	5·0444418	6·0919643
54	5·0567649	6·1057435	54	5·0436184	6·0881826	54	5·0302917	6·0700127

JOINT LIVES :—Two Females.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	48			49			50	
Age of (x)	λ $D_{x,48}$	λ $N_{x,48}$	Age of (x)	λ $D_{x,49}$	λ $N_{x,49}$	Age of (x)	λ $D_{x,50}$	λ $N_{x,50}$
55	5·0417178	6·0824974	55	5·0285713	6·0651023	55	5·0152446	6·0471057
56	5·0260911	6·0582733	56	5·0129446	6·0410436	56	4·9996179	6·0232203
57	5·0098589	6·0330125	57	4·9967124	6·0159487	57	4·9833857	5·9982989
58	4·9929842	6·0066526	58	4·9798377	5·9897531	58	4·9665110	5·9722767
59	4·9754193	5·9791234	59	4·9622728	5·9623873	59	4·9489461	5·9450835
60	4·9571054	5·9503498	60	4·9439589	5·9337755	60	4·9306322	5·9166426
61	4·9379726	5·9202507	61	4·9248261	5·9038354	61	4·9114994	5·8868716
62	4·9179405	5·8887371	62	4·9047940	5·8724786	62	4·8914673	5·8556817
63	4·8969174	5·8557153	63	4·8837709	5·8396101	63	4·8704442	5·8229776
64	4·8748007	5·8210839	64	4·8616542	5·8051289	64	4·8483275	5·7886567
65	4·8514771	5·7847346	65	4·8383306	5·7689261	65	4·8250039	5·7526114
66	4·8268220	5·7465523	66	4·8136755	5·7308863	66	4·8003488	5·7147250
67	4·8007001	5·7064143	67	4·7875536	5·6908864	67	4·7742269	5·6748746
68	4·7729652	5·6641905	68	4·7598187	5·6487961	68	4·7464920	5·6329291
69	4·7434599	5·6197420	69	4·7303134	5·6044768	69	4·7169867	5·5887500
70	4·7120162	5·5729229	70	4·6988697	5·5577818	70	4·6855430	5·5421906
71	4·6784549	5·5235775	71	4·6653084	5·5085559	71	4·6519817	5·4930951
72	4·6425859	5·4715421	72	4·6294394	5·4566349	72	4·6161127	5·4413000
73	4·6042083	5·4166438	73	4·5910618	5·4018457	73	4·5777351	5·3866313
74	4·5631102	5·3586999	74	4·5499637	5·3440062	74	4·5366370	5·3289067
75	4·5190686	5·2975174	75	4·5059221	5·2829238	75	4·4925954	5·2679345
76	4·4718497	5·2328950	76	4·4587032	5·2183955	76	4·4453765	5·2035123
77	4·4212089	5·1646202	77	4·4080624	5·1502101	77	4·3947357	5·1354266
78	4·3668903	5·0924691	78	4·3537438	5·0781446	78	4·3404171	5·0634558
79	4·3086274	5·0162087	79	4·2954809	5·0019642	79	4·2821542	4·9873664
80	4·2461426	4·9355929	80	4·2329961	4·9214247	80	4·2196694	4·9069123
81	4·1791474	4·8503675	81	4·1660009	4·8362703	81	4·1526742	4·8218390
82	4·1073423	4·7602641	82	4·0941958	4·7462340	82	4·0808691	4·7318787
83	4·0304170	4·6650037	83	4·0172705	4·6510366	83	4·0039438	4·6367536
84	3·9480500	4·5642962	84	3·9349035	4·5503878	84	3·9215768	4·5361723
85	3·8599093	4·4578385	85	3·8467628	4·4439852	85	3·8334361	4·4298332
86	3·7656514	4·3453157	86	3·7525049	4·3315139	86	3·7391782	4·3174219
87	3·6649223	4·2264011	87	3·6517758	4·2126475	87	3·6384491	4·1986115
88	3·5573569	4·1007558	88	3·5442104	4·0870468	88	3·5308837	4·0730630
89	3·4425791	3·9680269	89	3·4294326	3·9543597	89	3·4161059	3·9404248
90	3·3202020	3·8278511	90	3·3070555	3·8142217	90	3·2937288	3.8003328
91	3·1898277	3·6798474	91	3·1766812	3·6662549	91	3·1633545	3·6524078
92	3·0510473	3·5236242	92	3·0379008	3·5100649	92	3·0245741	3·4962584
93	2·9034411	3·3587707	93	2·8902946	3·3452424	93	2·8769679	3·3314730
94	2·7465782	3·1848589	94	2·7334317	3·1713593	94	2·7201050	3·1576248
95	2·5800170	3·0014330	95	2·5668705	2·9879620	95	2·5535438	2·9742597
96	2·4033050	2·8080035	96	2·3901585	2·7945585	96	2·3768318	2·7808888
97	2·2159785	2·6040218	97	2·2028320	2·5906023	97	2·1895053	2·5769630
98	2·0175632	2·3888416	98	2·0044167	2·3754478	98	1·9910900	2·3618394
99	1·8075734	2·1616312	99	1·7944269	2·1482635	99	1·7811002	2·1346867
100	1·5855129	1·9211931	100	1·5723664	1·9078530	100	1·5590397	1·8943100
101	1·3508744	1·6655669	101	1·3377279	1·6522521	101	1·3244012	1·6387458
102	1·1031396	1·3910728	102	1·0899931	1·3777832	102	1·0766664	1·3643089
103	0·8417793	1·0897886	103	0·8286328	1·0765385	103	0·8153061	1·0630968
104	0·5662535	0·7415534	104	0·5531070	0·7283538	104	0·5397803	0·7149665
105	0·2760109		105	0·2628644		105	0·2495377	
106	9·9704897		106	9·9573432		106	9·9440165	
107	9·6491168		107	9·6359703		107	9·6226436	
108	9·3113084		108	9·2981619		108	9·2848352	
109	8·9564696		109	8·9433231		109	8·9299964	

JOINT LIVES :—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	51			52			53	
Age of (x)	$\lambda\ D_{x,\,51}$	$\lambda\ N_{x,\,51}$	Age of (x)	$\lambda\ D_{x,\,52}$	$\lambda\ N_{x,\,52}$	Age of (x)	$\lambda\ D_{x,\,53}$	$\lambda\ N_{x,\,53}$
0	5·7179316	6·7598846	0	5·7042145	6·7369872	0	5·6902864	6·7133473
1	5·6486734	6·7416168	1	5·6349563	6·7185479	1	5·6210282	6·6947230
2	5·6144958	6·7281958	2	5·6007787	6·7050580	2	5·5868506	6·6811580
3	5·5924326	6·7165803	3	5·5787155	6·6934133	3	5·5647874	6·6694807
4	5·5753850	6·7058346	4	5·5616679	6·6826579	4	5·5477398	6·6587141
5	5·5612186	6·6955927	5	5·5475015	6·6724200	5	5·5335734	6·6484779
6	5·5489951	6·6856515	6	5·5352780	6·6624906	6	5·5213499	6·6385601
7	5·5379693	6·6758730	7	5·5242522	6·6527296	7	5·5103241	6·6288162
8	5·5275898	6·6661713	8	5·5138727	6·6430492	8	5·4999446	6·6191570
9	5·5178207	6·6564983	9	5·5041036	6·6334006	9	5·4901755	6·6095327
10	5·5085183	6·6468061	10	5·4948012	6·6237351	10	5·4808731	6·5998938
11	5·4995511	6·6370556	11	5·4858340	6·6140124	11	5·4719059	6·5901992
12	5·4907998	6·6272157	12	5·4770827	6·6042004	12	5·4631546	6·5804157
13	5·4821576	6·6172619	13	5·4684405	6·5942749	13	5·4545124	6·5705184
14	5·4735297	6·6071765	14	5·4598126	6·5842176	14	5·4458845	6·5604891
15	5·4648335	6·5969486	15	5·4511164	6·5740168	15	5·4371883	6·5503159
16	5·4559987	6·5865723	16	5·4422816	6·5636669	16	5·4283535	6·5399928
17	5·4469673	6·5760464	17	5·4332502	6·5531677	17	5·4193221	6·5295193
18	5·4376935	6·5653750	18	5·4239764	6·5425222	18	5·4100483	6·5188998
19	5·4281436	6·5545659	19	5·4144265	6·5317384	19	5·4004984	6·5081415
20	5·4182962	6·5436286	20	5·4045791	6·5208277	20	5·3906510	6·4972559
21	5·4081422	6·5325768	21	5·3944251	6·5098023	21	5·3804970	6·4862571
22	5·3978906	6·5214236	22	5·3841735	6·4986777	22	5·3702454	6·4751595
23	5·3875450	6·5101673	23	5·3738279	6·4874510	23	5·3598998	6·4639622
24	5·3771080	6·4988049	24	5·3633909	6·4761208	24	5·3494628	6·4526623
25	5·3665823	6·4873342	25	5·3528652	6·4646828	25	5·3389371	6·4412575
26	5·3559696	6·4757496	26	5·3422525	6·4531347	26	5·3283244	6·4297431
27	5·3452716	6·4640460	27	5·3315545	6·4414703	27	5·3176264	6·4181164
28	5·3344893	6·4522180	28	5·3207722	6·4296839	28	5·3068441	6·4063708
29	5·3236232	6·4402583	29	5·3099061	6·4177698	29	5·2959780	6·3945001
30	5·3126733	6·4281601	30	5·2989562	6·4057197	30	5·2850281	6·3824972
31	5·3016394	6·4159134	31	5·2879223	6·3935265	31	5·2739942	6·3703539
32	5·2905206	6·4035092	32	5·2768035	6·3811788	32	5·2628754	6·3580621
33	5·2793155	6·3909349	33	5·2655984	6·3686674	33	5·2516703	6·3456098
34	5·2680224	6·3781800	34	5·2543053	6·3559787	34	5·2403772	6·3329867
35	5·2566390	6·3652302	35	5·2429219	6·3431008	35	5·2289938	6·3201781
36	5·2451625	6·3520696	36	5·2314454	6·3300191	36	5·2175173	6·3071718
37	5·2335899	6·3386830	37	5·2198728	6·3167160	37	5·2059447	6·2939512
38	5·2219174	6·3250521	38	5·2082003	6·3031752	38	5·1942722	6·2804980
39	5·2101409	6·3111567	39	5·1964238	6·2893772	39	5·1824957	6·2667944
40	5·1982559	6·2969764	40	5·1845388	6·2752996	40	5·1706107	6·2528191
41	5·1862572	6·2824880	41	5·1725401	6·2609213	41	5·1586120	6·2385487
42	5·1741393	6·2676656	42	5·1604222	6·2462166	42	5·1464941	6·2239596
43	5·1618962	6·2524833	43	5·1481791	6·2311580	43	5·1342510	6·2090242
44	5·1495215	6·2369113	44	5·1358044	6·2157172	44	5·1218763	6·1937130
45	5·1370081	6·2209174	45	5·1232910	6·1998612	45	5·1093629	6·1779951
46	5·1243488	6·2044681	46	5·1106317	6·1835559	46	5·0967036	6·1618347
47	5·1115356	6·1875249	47	5·0978185	6·1667648	47	5·0838904	6·1451942
48	5·0985602	6·1700481	48	5·0848431	6·1494451	48	5·0709150	6·1280336
49	5·0854137	6·1519931	49	5·0716966	6·1315532	49	5·0577685	6·1103065
50	5·0720870	6·1333118	50	5·0583699	6·1130404	50	5·0444418	6·0919643
51	5·0585702	6·1139514	51	5·0448531	6·0938534	51	5·0309250	6·0729535
52	5·0448531	6·0938534	52	5·0311360	6·0739331	52	5·0172079	6·0532141
53	5·0309250	6·0729535	53	5·0172079	6·0532141	53	5·0032798	6·0326804
54	5·0167749	6·0511799	54	5·0030578	6·0316245	54	4·9891297	6·0112789

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Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	51			52			53	
Age of (x)	λ $D_{x,\,51}$	λ $N_{x,\,51}$	Age of (x)	λ $D_{x,\,52}$	λ $N_{x,\,52}$	Age of (x)	λ $D_{x,\,53}$	λ $N_{x,\,53}$
55	5·0017278	6·0284525	55	4·9880107	6·0090824	55	4·9740826	5·9889281
56	4·9861011	6·0047482	56	4·9723840	5·9855654	56	4·9584559	5·9656043
57	4·9698689	5·9800079	57	4·9561518	5·9610139	57	4·9422237	5·9412481
58	4·9529942	5·9541673	58	4·9392771	5·9353625	58	4·9253490	5·9157933
59	4·9354293	5·9271552	59	4·9217122	5·9085399	59	4·9077841	5·8891679
60	4·9171154	5·8988947	60	4·9033983	5·8804685	60	4·8894702	5·8612939
61	4·8979826	5·8693025	61	4·8842655	5·8510646	61	4·8703374	5·8320870
62	4·8779505	5·8382895	62	4·8642334	5·8202382	62	4·8503053	5·8014564
63	4·8569274	5·8057596	63	4·8432103	5·7878930	63	4·8292822	5·7693055
64	4·8348107	5·7716108	64	4·8210936	5·7539261	64	4·8071655	5·7355305
65	4·8114871	5·7357333	65	4·7977700	5·7182279	65	4·7838419	5·7000215
66	4·7868320	5·6980117	66	4·7731149	5·6806813	66	4·7591868	5·6626614
67	4·7607101	5·6583218	67	4·7469930	5·6411631	67	4·7330649	5·6233251
68	4·7329752	5·6165325	68	4·7192581	5·5995415	68	4·7053300	5·5818819
69	4·7034699	5·5725052	69	4·6897528	5·5556771	69	4·6758247	5·5381914
70	4·6720262	5·5260924	70	4·6583091	5·5094227	70	4·6443810	5·4921064
71	4·6384649	5·4771392	71	4·6247478	5·4606227	71	4·6108197	5·4434704
72	4·6025959	5·4254806	72	4·5888788	5·4091125	72	4·5749507	5·3921193
73	4·5642183	5·3709441	73	4·5505012	5·3547184	73	4·5365731	5·3378796
74	4·5231202	5·3133462	74	4·5094031	5·2972588	74	4·4954750	5·2805679
75	4·4790786	5·2524950	75	4·4653615	5·2365401	75	4·4514334	5·2199928
76	4·4318597	5·1881886	76	4·4181426	5·1723606	76	4·4042145	5·1559506
77	4·3812189	5·1202149	77	4·3675018	5·1045083	77	4·3535737	5·0882303
78	4·3269003	5·0483494	78	4·3131832	5·0327602	78	4·2992551	5·0166088
79	4·2686374	4·9723602	79	4·2549203	4·9568818	79	4·2409922	4·9408525
80	4·2061526	4·8920027	80	4·1924355	4·8766306	80	4·1785074	4·8607164
81	4·1391574	4·8070206	81	4·1254403	4·7917496	81	4·1115122	4·7759467
82	4·0673523	4·7171468	82	4·0536352	4·7019727	82	4·0397071	4·6862760
83	3·9904270	4·6221030	83	3·9767099	4·6070205	83	3·9627818	4·5914249
84	3·9080600	4·5215992	84	3·8943429	4·5066039	84	3·8804148	4·4911045
85	3·8199193	4·4153331	85	3·8062022	4·4004204	85	3·7922741	4·3850130
86	3·7256614	4·3029903	86	3·7119443	4·2881560	86	3·6980162	4·2728359
87	3·6249323	4·1842450	87	3·6112152	4·1694849	87	3·5972871	4·1542474
88	3·5173669	4·0587577	88	3·5036498	4·0440681	88	3·4897217	4·0289098
89	3·4025891	3·9261773	89	3·3888720	3·9115539	89	3·3749439	3·8964711
90	3·2802120	3·7861386	90	3·2664949	3·7715786	90	3·2525668	3·7565677
91	3·1498377	3·6382646	91	3·1361206	3·6237639	91	3·1221925	3·6088212
92	3·0110573	3·4821616	92	2·9973402	3·4677174	92	2·9834121	3·4528388
93	2·8634511	3·3174219	93	2·8497340	3·3030306	93	2·8358059	3·2882146
94	2·7065882	3·1436161	94	2·6928711	3·1292754	94	2·6789430	3·1145183
95	2·5400270	2·9602909	95	2·5263099	2·9459990	95	2·5123818	2·9312987
96	2·3633150	2·7669576	96	2·3495979	2·7527121	96	2·3356698	2·7380675
97	2·1759885	2·5630704	97	2·1622714	2·5488695	97	2·1483433	2·5342787
98	1·9775732	2·3479834	98	1·9638561	2·3338288	98	1·9499280	2·3192922
99	1·7675834	2·1208692	99	1·7538663	2·1067616	99	1·7399382	2·0922816
100	1·5455229	1·8805341	100	1·5318058	1·8664776	100	1·5178777	1·8520583
101	1·3108844	1·6250170	101	1·2971673	1·6110187	101	1·2832392	1·5966697
102	1·0631496	1·3506337	102	1·0494325	1·3367058	102	1·0355044	1·3224426
103	0·8017893	1·0494661	103	0·7880722	1·0356218	103	0·7741441	1·0214704
104	0·5262635	0·7013780	104	0·5125464	0·6876003	104	0·4986183	0·6735922
105	0·2360209		105	0·2223038		105	0·2083757	
106	9·9304997		106	9·9167826		106	9·9028545	
107	9·6091268		107	9·5954097		107	9·5814816	
108	9·2713184		108	9·2576013		108	9·2436732	
109	8·9164796		109	8·9027625		109	8·8888344	

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Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	54		55			56		
Age of (x)	$\lambda D_{x,54}$	$\lambda N_{x,54}$	Age of (x)	$\lambda D_{x,55}$	$\lambda N_{x,55}$	Age of (x)	$\lambda D_{x,56}$	$\lambda N_{x,56}$
0	5·6761363	6·6888997	0	5·6610892	6·6635652	0	5·6454625	6·6373279
1	5·6068781	6·6700782	1	5·5918310	6·6445376	1	5·5762043	6·6180820
2	5·5727005	6·6564323	2	5·5576534	6·6308072	2	5·5420267	6·6042603
3	5·5506373	6·6447188	3	5·5355902	6·6190550	3	5·5199635	6·5924665
4	5·5335897	6·6339388	4	5·5185426	6·6082598	4	5·5029159	6·5816538
5	5·5194233	6·6237036	5	5·5043762	6·5980243	5	5·4887495	6·5714165
6	5·5071998	6·6137958	6	5·4921527	6·5881265	6	5·4765260	6·5615273
7	5·4961740	6·6040692	7	5·4811269	6·5784157	7	5·4655002	6·5518328
8	5·4857945	6·5944310	8	5·4707474	6·5687992	8	5·4551207	6·5422365
9	5·4760254	6·5848312	9	5·4609783	6·5592237	9	5·4453516	6·5326862
10	5·4667230	6·5752188	10	5·4516759	6·5496381	10	5·4360492	6·5231275
11	5·4577558	6·5655521	11	5·4427087	6·5399997	11	5·4270820	6·5135174
12	5·4490045	6·5557976	12	5·4339574	6·5302737	12	5·4183307	6·5038206
13	5·4403623	6·5459289	13	5·4253152	6·5204342	13	5·4096885	6·4940099
14	5·4317344	6·5359277	14	5·4166872	6·5104614	14	5·4010606	6·4840660
15	5·4230382	6·5257821	15	5·4079911	6·5003432	15	5·3923644	6·4739754
16	5·4142034	6·5154858	16	5·3991563	6·4900736	16	5·3835296	6·4637324
17	5·4051720	6·5050381	17	5·3901249	6·4796519	17	5·3744982	6·4533363
18	5·3958982	6·4944434	18	5·3808511	6·4690821	18	5·3652244	6·4427918
19	5·3863483	6·4837106	19	5·3713012	6·4583733	19	5·3556745	6·4321068
20	5·3765009	6·4728502	20	5·3614538	6·4475377	20	5·3458271	6·4212951
21	5·3663469	6·4618765	21	5·3512998	6·4365893	21	5·3356731	6·4103713
22	5·3560953	6·4508061	22	5·3410482	6·4255442	22	5·3254215	6·3993518
23	5·3457497	6·4396364	23	5·3307026	6·4144022	23	5·3150759	6·3882356
24	5·3353127	6·4283665	24	5·3202656	6·4031603	24	5·3046389	6·3770222
25	5·3247870	6·4169928	25	5·3097399	6·3918173	25	5·2941132	6·3657079
26	5·3141743	6·4055127	26	5·2991272	6·3803692	26	5·2835005	6·3542910
27	5·3034763	6·3939208	27	5·2884292	6·3688126	27	5·2728025	6·3427674
28	5·2926940	6·3822141	28	5·2776469	6·3571417	28	5·2620202	6·3311332
29	5·2818279	6·3703854	29	5·2667808	6·3453533	29	5·2511541	6·3193818
30	5·2708780	6·3584277	30	5·2558309	6·3334392	30	5·2402042	6·3075092
31	5·2598441	6·3463336	31	5·2447970	6·3213919	31	5·2291703	6·2955073
32	5·2487253	6·3340939	32	5·2336782	6·3092034	32	5·2180515	6·2833675
33	5·2375202	6·3216998	33	5·2224731	6·2968635	33	5·2068464	6·2710808
34	5·2262271	6·3091383	34	5·2111800	6·2843626	34	5·1955533	6·2586368
35	5·2148437	6·2963986	35	5·1997966	6·2716874	35	5·1841699	6·2460247
36	5·2033672	6·2834645	36	5·1883201	6·2588252	36	5·1726934	6·2332300
37	5·1917946	6·2703229	37	5·1767475	6·2457591	37	5·1611208	6·2202392
38	5·1801221	6·2569560	38	5·1650750	6·2324749	38	5·1494483	6·2070340
39	5·1683456	6·2433441	39	5·1532985	6·2189533	39	5·1376718	6·1935993
40	5·1564606	6·2294682	40	5·1414135	6·2051735	40	5·1257868	6·1799138
41	5·1444619	6·2153047	41	5·1294148	6·1911138	41	5·1137881	6·1659556
42	5·1323440	6·2008286	42	5·1172969	6·1767500	42	5·1016702	6·1517005
43	5·1201009	6·1860148	43	5·1050538	6·1620545	43	5·0894271	6·1371227
44	5·1077262	6·1708327	44	5·0926791	6·1469998	44	5·0770524	6·1221923
45	5·0952128	6·1552506	45	5·0801657	6·1315529	45	5·0645390	6·1068790
46	5·0825535	6·1392348	46	5·0675064	6·1156794	46	5·0518797	6·0911473
47	5·0697403	6·1227459	47	5·0546932	6·0993419	47	5·0390665	6·0749590
48	5·0567649	6·1057435	48	5·0417178	6·0824974	48	5·0260911	6·0582733
49	5·0436184	6·0881826	49	5·0285713	6·0651023	49	5·0129446	6·0410436
50	5·0302917	6·0700127	50	5·0152446	6·0471057	50	4·9996179	6·0232203
51	5·0167749	6·0511799	51	5·0017278	6·0284525	51	4·9861011	6·0047482
52	5·0030578	6·0316245	52	4·9880107	6·0090824	52	4·9723840	5·9855654
53	4·9891297	6·0112789	53	4·9740826	5·9889281	53	4·9584559	5·9656043
54	4·9749796	5·9900703	54	4·9599325	5·9679144	54	4·9443058	5·9447891

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Logarithms of the Series $D_{x, y}$ and $N_{x, y}$.

Age of (y)	54		55			56		
Age of (x)	$\lambda D_{x, 54}$	$\lambda N_{x, 54}$	**Age** of (c)	$\lambda D_{x, 55}$	$\lambda N_{x, 55}$	**Age** of (x)	$\lambda D_{x, 56}$	$\lambda N_{x, 56}$
55	4·9599325	5·9679144	55	4·9448854	5·9459577	55	4·9292587	5·9230348
56	4·9443058	5·9447891	56	4·9292587	5·9230348	56	4·9136320	5·9003192
57	4·9280736	5·9206339	57	4·9130265	5·8990853	57	4·8973998	5·8765802
58	4·9111989	5·8953820	58	4·8961518	5·8740417	58	4·8805251	5·8517508
59	4·8936340	5·8689610	59	4·8785869	5·8478310	59	4·8629602	5·8257567
60	4·8753201	5·8412917	60	4·8602730	5·8203735	60	4·8446463	5·7985177
61	4·8561873	5·8122898	61	4·8411402	5·7915834	61	4·8255135	5·7699476
62	4·8361552	5·7818637	62	4·8211081	5·7613692	62	4·8054814	5·7399536
63	4·8151321	5·7499159	63	4·8000850	5·7296327	63	4·7844583	5·7084370
64	4·7930154	5·7163424	64	4·7779683	5·6962686	64	4·7623416	5·6752922
65	4·7696918	5·6810322	65	4·7546447	5·6611660	65	4·7390180	5·6404068
66	4·7450367	5·6438677	66	4·7299896	5·6242062	66	4·7143629	5·6036619
67	4·7189148	5·6047243	67	4·7038677	5·5852640	67	4·6882410	5·5649317
68	4·6911799	5·5634689	68	4·6761328	5·5442066	68	4·6605061	5·5240825
69	4·6616746	5·5199629	69	4·6466275	5·5008931	69	4·6310008	5·4809737
70	4·6302309	5·4740571	70	4·6151838	5·4551760	70	4·5995571	5·4354556
71	4·5966696	5·4255958	71	4·5816225	5·4068980	71	4·5659958	5·3873724
72	4·5608006	5·3744140	72	4·5457535	5·3558942	72	4·5301268	5·3365578
73	4·5224230	5·3203378	73	4·5073759	5·3019904	73	4·4917492	5·2828375
74	4·4813249	5·2631848	74	4·4662778	5·2450036	74	4·4506511	5·2260283
75	4·4372833	5·2027618	75	4·4222362	5·1847414	75	4·4066095	5·1659372
76	4·3900644	5·1388674	76	4·3750173	5·1210011	76	4·3593906	5·1023620
77	4·3394236	5·0712879	77	4·3243765	5·0535709	77	4·3087498	5·0350902
78	4·2851050	4·9998019	78	4·2700579	4·9822265	78	4·2544312	4·9638992
79	4·2268421	4·9241759	79	4·2117950	4·9067363	79	4·1961683	4·8885541
80	4·1643573	4·8441645	80	4·1493102	4·8268558	80	4·1336835	4·8088130
81	4·0973621	4·7595130	81	4·0823150	4·7423291	81	4·0666883	4·7244200
82	4·0255570	4·6699562	82	4·0105099	4·6528891	82	3·9948832	4·6351081
83	3·9486317	4·5752139	83	3·9335846	4·5582604	83	3·9179579	4·5405997
84	3·8662647	4·4749976	84	3·8512176	4·4581511	84	3·8355909	4·4406059
85	3·7781240	4·3690047	85	3·7630769	4·3522605	85	3·7474502	4·3348247
86	3·6838661	4·2569223	86	3·6688190	4·2402746	86	3·6531923	4·2229435
87	3·5831370	4·1384237	87	3·5680899	4·1218686	87	3·5524632	4·1046356
88	3·4755716	4·0131710	88	3·4605245	3·9967030	88	3·4448978	3·9795648
89	3·3607938	3·8808142	89	3·3457467	3·8644286	89	3·3301200	3·8473783
90	3·2384167	3·7409884	90	3·2233696	3·7246813	90	3·2077429	3·7077158
91	3·1080424	3·5933171	91	3·0929953	3·5770838	91	3·0773686	3·5601985
92	2·9692620	3·4374057	92	2·9542149	3·4212443	92	2·9385882	3·4044350
93	2·8216558	3·2728486	93	2·8066087	3·2567550	93	2·7909820	3·2400178
94	2·6647929	3·0992188	94	2·6497458	3·0831886	94	2·6341191	3·0665208
95	2·4982317	2·9160616	95	2·4831846	2·9000950	95	2·4675579	2·8834922
96	2·3215197	2·7228921	96	2·3064726	2·7069839	96	2·2908459	2·6904477
97	2·1341932	2·5191649	97	2·1191461	2·5033166	97	2·1035194	2·4868412
98	1·9357779	2·3042386	98	1·9207308	2·2884498	98	1·9051041	2·2720390
99	1·7257881	2·0772920	99	1·7107410	2·0615633	99	1·6951143	2·0452181
100	1·5037276	1·8371375	100	1·4886805	1·8214755	100	1·4730538	1·8051997
101	1·2690891	1·5818268	101	1·2540420	1·5662395	101	1·2384153	1·5500448
102	1·0213543	1·3076949	102	1·0063072	1·2921963	102	0·9906805	1·2760963
103	0·7599940	1·0068467	103	0·7449469	0·9914609	103	0·7293202	0·9754778
104	0·4844682	0·6591458	104	0·4694211	0·6439065	104	0·4537944	0·6280720
105	0·1942256		105	0·1791785		105	0·1635518	
106	9·8887044		106	9·8736573		106	9·8580306	
107	9·5673315		107	9·5522844		107	9·5366577	
108	9·2295231		108	9·2144760		108	9·1988493	
109	8·8746843		109	8·8596372		109	8·8440105	

JOINT LIVES :—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	57		58			59		
Age of (x)	$\lambda\ D_{x,\,57}$	$\lambda\ N_{x,\,57}$	**Age** of (x)	$\lambda\ D_{x,\,58}$	$\lambda\ N_{x,\,58}$	**Age** of (x)	$\lambda\ D_{x,\,59}$	$\lambda\ N_{x,\,59}$
0	5·6292303	6·6101346	0	5·6123556	6·5819266	0	5·5947907	6·5526390
1	5·5599721	6·5906570	1	5·5430974	6·5622027	1	5·5255325	6·5326526
2	5·5257945	6·5767378	2	5·5089198	6·5481789	2	5·4913549	6·5185169
3	5·5037313	6·5648976	3	5·4868566	6·5362887	3	5·4692917	6·5065723
4	5·4866837	6·5540657	4	5·4698090	6·5254337	4	5·4522441	6·4956918
5	5·4725173	6·5438249	5	5·4556426	6·5151883	5	5·4380777	6·4854389
6	5·4602938	6·5339434	6	5·4434191	6·5053135	6	5·4258542	6·4755699
7	5·4492680	6·5242641	7	5·4323933	6·4956485	7	5·4148284	6·4659187
8	5·4388885	6·5146885	8	5·4220138	6·4860930	8	5·4044489	6·4563827
9	5·4291194	6·5051620	9	5·4122447	6·4765913	9	5·3946798	6·4469052
10	5·4198170	6·4956314	10	5·4029423	6·4670871	10	5·3853774	6·4374285
11	5·4108498	6·4860497	11	5·3939751	6·4575354	11	5·3764102	6·4279055
12	5·4020985	6·4763823	12	5·3852238	6·4478975	12	5·3676589	6·4182985
13	5·3934563	6·4666010	13	5·3765816	6·4381458	13	5·3590167	6·4085766
14	5·3848284	6·4566857	14	5·3679537	6·4282595	14	5·3503888	6·3987197
15	5·3761322	6·4466234	15	5·3592575	6·4182252	15	5·3416926	6·3887137
16	5·3672974	6·4364071	16	5·3504227	6·4080361	16	5·3328578	6·3785516
17	5·3582660	6·4260365	17	5·3413913	6·3976912	17	5·3238264	6·3682328
18	5·3489922	6·4155167	18	5·3321175	6·3871956	18	5·3145526	6·3577615
19	5·3394423	6·4048562	19	5·3225676	6·3765591	19	5·3050027	6·3471481
20	5·3295949	6·3940676	20	5·3127202	6·3657943	20	5·2951553	6·3364065
21	5·3194409	6·3831674	21	5·3025662	6·3549169	21	5·2850013	6·3255526
22	5·3091893	6·3721729	22	5·2923146	6·3439462	22	5·2747497	6·3146049
23	5·2988437	6·3610827	23	5·2819690	6·3328814	23	5·2644041	6·3035643
24	5·2884067	6·3498954	24	5·2715320	6·3217206	24	5·2539671	6·2924293
25	5·2778810	6·3386102	25	5·2610063	6·3104621	25	5·2434414	6·2811977
26	5·2672683	6·3272230	26	5·2503936	6·2991047	26	5·2328287	6·2698677
27	5·2565703	6·3157315	27	5·2396956	6·2876437	27	5·2221307	6·2584371
28	5·2457880	6·3041314	28	5·2289133	6·2760763	28	5·2113484	6·2469012
29	5·2349219	6·2924175	29	5·2180472	6·2643977	29	5·2004823	6·2352565
30	5·2239720	6·2805836	30	5·2070973	6·2526028	30	5·1895324	6·2234977
31	5·2129381	6·2686248	31	5·1960634	6·2406840	31	5·1784985	6·2116191
32	5·2018193	6·2565320	32	5·1849446	6·2286360	32	5·1673797	6·1996129
33	5·1906142	6·2442962	33	5·1737395	6·2164491	33	5·1561746	6·1874724
34	5·1793211	6·2319075	34	5·1624464	6·2041134	34	5·1448815	6·1751879
35	5·1679377	6·2193547	35	5·1510630	6·1916184	35	5·1334981	6·1627481
36	5·1564612	6·2066262	36	5·1395865	6·1789520	36	5·1220216	6·1501419
37	5·1448886	6·1937060	37	5·1280139	6·1661011	37	5·1104490	6·1373560
38	5·1332161	6·1805798	38	5·1163414	6·1530490	38	5·0987765	6·1243764
39	5·1214396	6·1672281	39	5·1045649	6·1397797	39	5·0870000	6·1111849
40	5·1095546	6·1536338	40	5·0926799	6·1262727	40	5·0751150	6·0977643
41	5·0975559	6·1397743	41	5·0806812	6·1125089	41	5·0631163	6·0840924
42	5·0854380	6·1256257	42	5·0685633	6·0984642	42	5·0509984	6·0701480
43	5·0731949	6·1111620	43	5·0563202	6·0841125	43	5·0387553	6·0559051
44	5·0608202	6·0963552	44	5·0439155	6·0694254	44	5·0263806	6·0413359
45	5·0483068	6·0811726	45	5·0314321	6·0543725	45	5·0138672	6·0264091
46	5·0356475	6·0655808	46	5·0187728	6·0389181	46	5·0012079	6·0110906
47	5·0228343	6·0495413	47	5·0059596	6·0230256	47	4·9883947	5·9953423
48	5·0098589	6·0330125	48	4·9929842	6·0066526	48	4·9754193	5·9791234
49	4·9967124	6·0159487	49	4·9798377	5·9897531	49	4·9622728	5·9623873
50	4·9833857	5·9982989	50	4·9665110	5·9722767	50	4·9489461	5·9450835
51	4·9698689	5·9800079	51	4·9529942	5·9541673	51	4·9354293	5·9271552
52	4·9561518	5·9610139	52	4·9392771	5·9353625	52	4·9217122	5·9085399
53	4·9422237	5·9412481	53	4·9253190	5·9157933	53	4·9077841	5·8891679
54	4·9280736	5·9206339	54	4·9111989	5·8953820	54	4·8936340	5·8689610

JOINT LIVES:—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	57		58			59		
Age of (x)	$\lambda D_{x,\,57}$	$\lambda N_{x,\,57}$	Age of (x)	$\lambda D_{x,\,58}$	$\lambda N_{x,\,58}$	Age of (x)	$\lambda D_{x,\,59}$	$\lambda N_{x,\,59}$
55	4·9130265	5·8990853	55	4·8961518	5·8740417	55	4·8785869	5·8478310
56	4·8973998	5·8765802	56	4·8805251	5·8517508	56	4·8629602	5·8257567
57	4·8811676	5·8530570	57	4·8642929	5·8284466	57	4·8467280	5·8026752
58	4·8642929	5·8284466	58	4·8474182	5·8040606	58	4·8298533	5·7785172
59	4·8467280	5·8026752	59	4·8298533	5·7785172	59	4·8122884	5·7532072
60	4·8284141	5·7756616	60	4·8115394	5·7517353	60	4·7939745	5·7266623
61	4·8092813	5·7473188	61	4·7924066	5·7236267	61	4·7748417	5·6987947
62	4·7892492	5·7175533	62	4·7723745	5·6940974	62	4·7548096	5·6695086
63	4·7682261	5·6862653	63	4·7513514	5·6630467	63	4·7337865	5·6387033
64	4·7461094	5·6533488	64	4·7292347	5·6303675	64	4·7116698	5·6062704
65	4·7227858	5·6186907	65	4·7059111	5·5959464	65	4·6883162	5·5720953
66	4·6981307	5·5821712	66	4·6812560	5·5596625	66	4·6636911	5·5360571
67	4·6720088	5·5436638	67	4·6551341	5·5213884	67	4·6375692	5·4980270
68	4·6442739	5·5030339	68	4·6273992	5·4809893	68	4·6098343	5·4578695
69	4·6147686	5·4601404	69	4·5978939	5·4383229	69	4·5803290	5·4154418
70	4·5833249	5·4148340	70	4·5664502	5·3932393	70	4·5488853	5·3705931
71	4·5497636	5·3669565	71	4·5328889	5·3455806	71	4·5153240	5·3231644
72	4·5138946	5·3163430	72	4·4970199	5·2951795	72	4·4794550	5·2729895
73	4·4755170	5·2628181	73	4·4586423	5·2418621	73	4·4410774	5·2198917
74	4·4344189	5·2061980	74	4·4175442	5·1854439	74	4·3999793	5·1636875
75	4·3903773	5·1462902	75	4·3735026	5·1257310	75	4·3559377	5·1041828
76	4·3431584	5·0828912	76	4·3262837	5·0625215	76	4·3087188	5·0411743
77	4·2925176	5·0157893	77	4·2756429	4·9956010	77	4·2580780	4·9744490
78	4·2381990	4·9447615	78	4·2213243	4·9247480	78	4·2037594	4·9037832
79	4·1799361	4·8695743	79	4·1630614	4·8497289	79	4·1454965	4·8289446
80	4·1174513	4·7899824	80	4·1005766	4·7702996	80	4·0830117	4·7496876
81	4·0504561	4·7057329	81	4·0335814	4·6862035	81	4·0160165	4·6657592
82	3·9786510	4·6165579	82	3·9617763	4·5971762	82	3·9442114	4·5768899
83	3·9017257	4·5221804	83	3·8848510	4·5029396	83	3·8672861	4·4828053
84	3·8193587	4·4223104	84	3·8024840	4·4032041	84	3·7849191	4·3832149
85	3·7312180	4·3166477	85	3·7143433	4·2976686	85	3·6967784	4·2778177
86	3·6369601	4·2048785	86	3·6200854	4·1860210	86	3·6025205	4·1663011
87	3·5362310	4·0866779	87	3·5193563	4·0679355	87	3·5017914	4·0483408
88	3·4286656	3·9617077	88	3·4117909	3·9430754	88	3·3942260	3·9235989
89	3·3138878	3·8296183	89	3·2970131	3·8110895	89	3·2794482	3·7917264
90	3·1915107	3·6900454	90	3·1746360	3·6716162	90	3·1570711	3·6523595
91	3·0611364	3·5426151	91	3·0442617	3·5242780	91	3·0266968	3·5051242
92	2·9223560	3·3869334	92	2·9054813	3·3686860	92	2·8879164	3·3496280
93	2·7747498	3·2225947	93	2·7578751	3·2044317	93	2·7403102	3·1854657
94	2·6178869	3·0491719	94	2·6010122	3·0310904	94	2·5834473	3·0122119
95	2·4513257	2·8662152	95	2·4344510	2·8482107	95	2·4168861	2·8294177
96	2·2746137	2·6732384	96	2·2577390	2·6553094	96	2·2401741	2·6365972
97	2·0872872	2·4697027	97	2·0704125	2·4518463	97	2·0528476	2·4332144
98	1·8888719	2·2549667	98	1·8719972	2·2371857	98	1·8544323	2·2186344
99	1·6788821	2·0282177	99	1·6620074	2·0105120	99	1·6444425	1·9920447
100	1·4568216	1·7882752	100	1·4399469	1·7706539	100	1·4223820	1·7522744
101	1·2221831	1·5332050	101	1·2053084	1·5156765	101	1·1877435	1·4974024
102	0·9744483	1·2593621	102	0·9575736	1·2419422	102	0·9400087	1·2237892
103	0·7130880	0·9588695	103	0·6962133	0·9415959	103	0·6786484	0·9235859
104	0·4375622	0·6116277	104	0·4206875	0·5945251	104	0·4031226	0·5767213
105	0·1473196		105	0·1304449		105	0·1128800	
106	9·8417984		106	9·8249237		106	9·8073588	
107	9·5204255		107	9·5035508		107	9·4859859	
108	9·1826171		108	9·1657424		108	9·1481775	
109	8·8277783		109	8·8109036		109	8·7933387	

JOINT LIVES :—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	60			61			62	
Age of (x)	λ $D_{x,\,60}$	λ $N_{x,\,60}$	Age of (x)	λ $D_{x,\,61}$	λ $N_{x,\,61}$	Age of (x)	λ $D_{x,\,62}$	λ $N_{x,\,62}$
0	5·5764768	6·5221999	0	5·5573440	6·4905319	0	5·5373119	6·4575506
1	5·5072186	6·5019352	1	5·4880858	6·4699705	1	5·4680537	6·4366744
2	5·4730410	6·4876791	2	5·4539082	6·4555866	2	5·4338761	6·4221529
3	5·4509778	6·4756753	3	5·4318450	6·4435180	3	5·4118129	6·4100152
4	5·4339302	6·4647662	4	5·4147974	6·4325771	4	5·3947653	6·3990385
5	5·4197638	6·4545042	5	5·4006310	6·4223037	5	5·3805989	6·3887509
6	5·4075403	6·4446386	6	5·3884075	6·4124405	6	5·3683754	6·3788888
7	5·3965145	6·4350009	7	5·3773817	6·4028141	7	5·3573496	6·3692732
8	5·3861350	6·4254840	8	5·3670022	6·3933165	8	5·3469701	6·3597929
9	5·3763659	6·4160302	9	5·3572331	6·3838864	9	5·3372010	6·3503868
10	5·3670635	6·4065810	10	5·3479307	6·3744645	10	5·3278986	6·3409919
11	5·3580963	6·3970875	11	5·3389635	6·3650004	11	5·3189314	6·3315575
12	5·3493450	6·3875102	12	5·3302122	6·3554538	12	5·3101801	6·3220418
13	5·3407028	6·3778196	13	5·3215700	6·3457933	13	5·3015379	6·3124124
14	5·3320749	6·3679922	14	5·3129421	6·3359970	14	5·2929100	6·3026459
15	5·3233787	6·3580146	15	5·3042459	6·3260482	15	5·2842138	6·2927271
16	5·3145439	6·3478800	16	5·2954111	6·3159406	16	5·2753790	6·2826471
17	5·3055125	6·3375867	17	5·2863797	6·3056733	17	5·2663476	6·2724053
18	5·2962387	6·3271402	18	5·2771059	6·2952510	18	5·2570738	6·2620075
19	5·2866888	6·3165501	19	5·2675560	6·2846842	19	5·2475239	6·2514635
20	5·2768414	6·3058306	20	5·2577086	6·2739874	20	5·2376765	6·2407888
21	5·2666874	6·2949996	21	5·2475546	6·2631779	21	5·2275225	6·2300013
22	5·2564358	6·2840757	22	5·2373030	6·2522769	22	5·2172709	6·2191223
23	5·2460902	6·2730583	23	5·2269574	6·2412835	23	5·2069253	6·2081518
24	5·2356532	6·2619477	24	5·2165204	6·2301965	24	5·1964883	6·1970889
25	5·2251275	6·2507425	25	5·2059947	6·2190161	25	5·1859626	6·1859324
26	5·2145148	6·2394396	26	5·1953820	6·2077399	26	5·1753499	6·1746815
27	5·2038168	6·2280373	27	5·1846840	6·1963653	27	5·1646519	6·1633341
28	5 1930345	6·2165325	28	5·1739017	6·1848896	28	5·1538696	6·1518866
29	5·1821684	6·2049203	29	5·1630356	6·1733089	29	5·1430035	6·1403358
30	5·1712185	6·1931964	30	5·1520857	6·1616186	30	5·1320536	6·1286781
31	5·1601846	6·1813553	31	5·1410518	6·1498137	31	5·1210197	6·1169075
32	5·1490658	6·1693905	32	5·1299330	6·1378878	32	5·1099009	6·1050191
33	5·1378607	6·1572935	33	5·1187279	6·1258338	33	5·0986958	6·0930054
34	5·1265676	6·1450574	34	5·1074348	6·1136426	34	5·0874027	6·0808587
35	5·1151842	6·1326707	35	5·0960514	6·1013067	35	5·0760193	6·0685695
36	5·1037077	6·1201223	36	5·0845749	6·0888134	36	5·0645428	6·0561293
37	5·0921351	6·1073993	37	5·0730023	6·0761509	37	5·0529702	6·0435242
38	5·0804626	6·0944879	38	5·0613298	6·0633052	38	5·0412977	6·0307418
39	5·0686861	6·0813725	39	5·0495533	6·0502610	39	5·0295212	6·0177669
40	5·0568011	6·0680334	40	5·0376683	6·0370020	40	5·0176362	6·0045823
41	5·0448024	6·0544518	41	5·0256696	6·0235060	41	5·0056375	5·9911703
42	5·0326845	6·0406043	42	5·0135517	6·0097534	42	4·9935196	5·9775074
43	5·0204414	6·0264671	43	5·0013086	5·9957181	43	4·9812765	5·9635713
44	5·0080667	6·0120121	44	4·9889339	5·9813741	44	4·9689018	5·9493349
45	4·9955533	5·9972086	45	4·9764205	5·9666908	45	4·9563884	5·9347685
46	4·9828940	5·9820226	46	4·9637612	5·9516346	46	4·9437291	5·9198386
47	4·9700808	5·9664171	47	4·9509480	5·9361683	47	4·9309159	5·9045087
48	4·9571054	5·9503498	48	4·9379726	5·9202507	48	4·9179405	5·8887371
49	4·9439589	5·9337755	49	4·9248261	5·9038354	49	4·9047940	5·8724786
50	4·9306322	5·9166426	50	4·9114994	5·8868716	50	4·8914673	5·8556817
51	4·9171154	5·8988947	51	4·8979826	5·8693025	51	4·8779505	5·8382895
52	4·9033983	5·8804685	52	4·8842655	5·8510646	52	4·8642334	5·8202382
53	4·8894702	5·8612939	53	4·8703374	5·8320870	53	4·8503053	5·8014564
54	4·8753201	5·8412917	54	4·8561873	5·8122898	54	4·8361552	5·7818637

JOINT LIVES:—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	60			61			62	
Age of (x)	$\lambda\, D_{x,\,60}$	$\lambda\, N_{x,\,60}$	**Age** of (x)	$\lambda\, D_{x,\,61}$	$\lambda\, N_{x,\,61}$	**Age** of (x)	$\lambda\, D_{x,\,62}$	$\lambda\, N_{x,\,62}$
55	4·8602730	5·8203735	55	4·8411402	5·7915834	55	4·8211081	5·7613692
56	4·8446463	5·7985177	56	4·8255135	5·7699476	56	4·8054814	5·7399536
57	4·8284141	5·7756616	57	4·8092813	5·7473188	57	4·7892492	5·7175533
58	4·8115394	5·7517353	58	4·7924066	5·7236267	58	4·7723745	5·6940974
59	4·7939745	5·7266623	59	4·7748417	5·6987947	59	4·7548096	5·6695086
60	4·7756606	5·7003601	60	4·7565278	5·6727386	60	4·7364957	5·6437029
61	4·7565278	5·6727386	61	4·7373950	5·6453693	61	4·7173629	5·6165890
62	4·7364957	5·6437029	62	4·7173629	5·6165890	62	4·6973308	5·5880706
63	4·7154726	5·6131500	63	4·6963398	5·5862959	63	4·6763077	5·5580423
64	4·6933559	5·5809716	64	4·6742231	5·5543793	64	4·6541910	5·5263949
65	4·6700323	5·5470519	65	4·6508995	5·5207233	65	4·6308674	5·4930099
66	4·6453772	5·5112687	66	4·6262444	5·4852045	66	4·6062123	5·4577640
67	4·6192553	5·4734930	67	4·6001225	5·4476929	67	4·5800904	5·4205258
68	4·5915204	5·4335882	68	4·5723876	5·4080509	68	4·5523555	5·3811568
69	4·5620151	5·3914103	69	4·5428823	5·3661343	69	4·5228502	5·3395117
70	4·5305714	5·3468082	70	4·5114386	5·3217901	70	4·4914065	5·2954371
71	4·4970101	5·2996223	71	4·4778773	5·2748591	71	4·4578452	5·2487722
72	4·4611411	5·2496850	72	4·4420083	5·2251722	72	4·4219762	5·1993479
73	4·4227635	5·1968206	73	4·4036307	5·1725527	73	4·3835986	5·1469868
74	4·3816654	5·1408429	74	4·3625326	5·1168158	74	4·3425005	5·0915021
75	4·3376238	5·0815590	75	4·3184910	5·0577654	75	4·2984589	5·0326993
76	4·2904049	5·0187650	76	4·2712721	4·9951989	76	4·2512400	4·9703729
77	4·2397641	4·9522474	77	4·2206313	4·9289021	77	4·2005992	4·9043102
78	4·1854155	4·8817823	78	4·1663127	4·8586509	78	4·1462806	4·8342866
79	4·1271826	4·8071364	79	4·1080498	4·7842113	79	4·0880177	4·7600672
80	4·0646978	4·7280655	80	4·0455650	4·7053393	80	4·0255329	4·6814068
81	3·9977026	4·6443146	81	3·9785698	4·6217796	81	3·9585377	4·5980514
82	3·9258975	4·5556173	82	3·9067647	4·5332657	82	3·8867326	4·5097344
83	3·8489722	4·4616959	83	3·8298394	4·4395204	83	3·8098073	4·4161775
84	3·7666052	4·3622619	84	3·7474724	4·3402543	84	3·7274403	4·3170927
85	3·6784645	4·2570141	85	3·6593317	4·2351675	85	3·6392996	4·2121783
86	3·5842066	4·1456398	86	3·5650738	4·1239470	86	3·5450417	4·1011234
87	3·4834775	4·0278142	87	3·4643447	4·0062679	87	3·4443126	3·9836024
88	3·3759121	3·9032013	88	3·3567793	3·8817937	88	3·3367472	3·8592788
89	3·2611343	3·7714508	89	3·2420015	3·7501758	89	3·2219694	3·7278039
90	3·1387572	3·6322011	90	3·1196244	3·6110517	90	3·0995923	3·5888160
91	3·0083829	3·4850752	91	2·9892501	3·4640461	91	2·9692180	3·4419407
92	2·8696025	3·3296842	92	2·8504697	3·3087694	92	2·8304376	3·2867876
93	2·7219963	3·1656218	93	2·7028635	3·1448158	93	2·6828314	3·1229524
94	2·5651334	2·9924633	94	2·5460006	2·9717614	94	2·5259685	2·9500108
95	2·3985722	2·8097610	95	2·3794394	2·7891582	95	2·3594073	2·7675165
96	2·2218602	2·6170308	96	2·2027274	2·5965256	96	2·1826953	2·5749880
97	2·0345337	2·4137338	97	2·0154009	2·3933260	97	1·9953688	2·3718924
98	1·8361184	2·1992425	98	1·8169856	2·1789283	98	1·7969535	2·1576006
99	1·6261286	1·9727437	99	1·6069958	1·9525290	99	1·5869637	1·9313094
100	1·4040681	1·7330728	100	1·3849353	1·7129652	100	1·3649032	1·6918627
101	1·1694296	1·4783081	101	1·1502968	1·4583235	101	1·1302647	1·4373541
102	0·9216948	1·2048332	102	0·9025620	1·1849866	102	0·8825299	1·1641803
103	0·6603345	0·9047967	103	0·6412017	0·8851406	103	0·6211696	0·8645170
104	0·3848087	0·5581323	104	0·3656759	0·5387119	104	0·3456438	0·5183560
105	0·0945661		105	0·0754333		105	0·0554012	
106	9·7890449		106	9·7699121		106	9·7498800	
107	9·4676720		107	9·4485392		107	9·4285071	
108	9·1298636		108	9·1107308		108	9·0906987	
109	8·7750248		109	8·7558920		109	8·7358599	

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Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	63			64			65	
Age of (x)	$\lambda D_{x,63}$	$\lambda N_{x,63}$	Age of (x)	$\lambda D_{x,64}$	$\lambda N_{x,64}$	Age of (x)	$\lambda D_{x,65}$	$\lambda N_{x,65}$
0	5·5162888	6·4231646	0	5·4941721	6·3872750	0	5·4708485	6·3497765
1	5·4470306	6·4019541	1	5·4249139	6·3657107	1	5·4015903	6·3278373
2	5·4128530	6·3872862	2	5·3907363	6·3508867	2	5·3674127	6·3128478
3	5·3907898	6·3750732	3	5·3686731	6·3385927	3	5·3453495	6·3004670
4	5·3737422	6·3640576	4	5·3516255	6·3275336	4	5·3283019	6·2893606
5	5·3595758	6·3537532	5	5·3374591	6·3172104	5	5·3141355	6·2790148
6	5·3473523	6·3438899	6	5·3252356	6·3073439	6	5·3019120	6·2691436
7	5·3363265	6·3342839	7	5·3142098	6·2977461	7	5·2908862	6·2595521
8	5·3259470	6·3248206	8	5·3038303	6·2882989	8	5·2805067	6·2501200
9	5·3161779	6·3154369	9	5·2940612	6·2789378	9	5·2707376	6·2407808
10	5·3068755	6·3060700	10	5·2847588	6·2695970	10	5·2614352	6·2314671
11	5·2979083	6·2966652	11	5·2757916	6·2602229	11	5·2524680	6·2221218
12	5·2891570	6·2871806	12	5·2670403	6·2507692	12	5·2437167	6·2127004
13	5·2805148	6·2775826	13	5·2583981	6·2412030	13	5·2350745	6·2031657
14	5·2718869	6·2678467	14	5·2497702	6·2314982	14	5·2264466	6·1934923
15	5·2631907	6·2579568	15	5·2410740	6·2216380	15	5·2177504	6·1836622
16	5·2543559	6·2479053	16	5·2322392	6·2116138	16	5·2089156	6·1736663
17	5·2453245	6·2376898	17	5·2232078	6·2014252	17	5·1998842	6·1635031
18	5·2360507	6·2273159	18	5·2139340	6·1910756	18	5·1906104	6·1531787
19	5·2265008	6·2167949	19	5·2043841	6·1805769	19	5·1810605	6·1427022
20	5·2166534	6·2061416	20	5·1945367	6·1699453	20	5·1712131	6·1320918
21	5·2064994	6·1953757	21	5·1843827	6·1592001	21	5·1610591	6·1213674
22	5·1962478	6·1845186	22	5·1741311	6·1483645	22	5·1508075	6·1105523
23	5·1859022	6·1735699	23	5·1637855	6·1374380	23	5·1404619	6·0996471
24	5·1754652	6·1625303	24	5·1533485	6·1264205	24	5·1300249	6·0886520
25	5·1649395	6·1513980	25	5·1428228	6·1153116	25	5·1194992	6·0775652
26	5·1543268	6·1401717	26	5·1322101	6·1041097	26	5·1088865	6·0663867
27	5·1436288	6·1288498	27	5·1215121	6·0928126	27	5·0981885	6·0551144
28	5·1328465	6·1174298	28	5·1107298	6·0814186	28	5·0874062	6·0437460
29	5·1219804	6·1059082	29	5·0998637	6·0699252	29	5·0765401	6·0322786
30	5·1110305	6·0942810	30	5·0889138	6·0583277	30	5·0655902	6·0207101
31	5·0999966	6·0825438	31	5·0778799	6·0466220	31	5·0545563	6·0090346
32	5·0888778	6·0706905	32	5·0667611	6·0348028	32	5·0434375	5·9972483
33	5·0776727	6·0587155	33	5·0555560	6·0228645	33	5·0322324	5·9853447
34	5·0663796	6·0466110	34	5·0442629	6·0107997	34	5·0209393	5·9733181
35	5·0549962	6·0343682	35	5·0328795	5·9986006	35	5·0095559	5·9611600
36	5·0435197	6·0219766	36	5·0214030	5·9862570	36	4·9980794	5·9488615
37	5·0319471	6·0094267	37	5·0098304	5·9737581	37	4·9865068	5·9364126
38	5·0202746	5·9967043	38	4·9981579	5·9610932	38	4·9748343	5·9238015
39	5·0084981	5·9837954	39	4·9863814	5·9482470	39	4·9630578	5·9110152
40	4·9966131	5·9706833	40	4·9744964	5·9352042	40	4·9511728	5·8980380
41	4·9846144	5·9573501	41	4·9624977	5·9219469	41	4·9391741	5·8848531
42	4·9724965	5·9437747	42	4·9503798	5·9084548	42	4·9270562	5·8714408
43	4·9602534	5·9299339	43	4·9381367	5·8947055	43	4·9148131	5·8577790
44	4·9478787	5·9158013	44	4·9257620	5·8806731	44	4·9024384	5·8438428
45	4·9353653	5·9013479	45	4·9132486	5·8663289	45	4·8899250	5·8296040
46	4·9227060	5·8865410	46	4·9005893	5·8516409	46	4·8772657	5·8150309
47	4·9098928	5·8713437	47	4·8877761	5·8365727	47	4·8644525	5·8000878
48	4·8969174	5·8557153	48	4·8748007	5·8210839	48	4·8514771	5·7847346
49	4·8837709	5·8396101	49	4·8616542	5·8051289	49	4·8383306	5·7689261
50	4·8704442	5·8229776	50	4·8483275	5·7886567	50	4·8250039	5·7526114
51	4·8569274	5·8057596	51	4·8348107	5·7716108	51	4·8114871	5·7357333
52	4·8432103	5·7878930	52	4·8210936	5·7539261	52	4·7977700	5·7182279
53	4·8292822	5·7693055	53	4·8071655	5·7355305	53	4·7838419	5·7000215
54	4·8151321	5·7499159	54	4·7930154	5·7163424	54	4·7696918	5·6810322

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Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	63			64			65	
Age of (x)	λ $D_{x,63}$	λ $N_{x,63}$	Age of (x)	λ $D_{x,64}$	λ $N_{x,64}$	Age of (x)	λ $D_{x,65}$	λ $N_{x,65}$
55	4·8000850	5·7296327	55	4·7779683	5·6962686	55	4·7546447	5·6611660
56	4·7844583	5·7084370	56	4·7623416	5·6752922	56	4·7390180	5·6404068
57	4·7682261	5·6862653	57	4·7461094	5·6533488	57	4·7227858	5·6186907
58	4·7513514	5·6630467	58	4·7292347	5·6303675	58	4·7059111	5·5959464
59	4·7337865	5·6387033	59	4·7116698	5·6062704	59	4·6883462	5·5720953
60	4·7154726	5·6131500	60	4·6933559	5·5809716	60	4·6700323	5·5470519
61	4·6963398	5·5862959	61	4·6742231	5·5543793	61	4·6508995	5·5207233
62	4·6763077	5·5580423	62	4·6541910	5·5263949	62	4·6308674	5·4930099
63	4·6552846	5·5282853	63	4·6331679	5·4969121	63	4·6098443	5·4638057
64	4·6331679	5·4969121	64	4·6110512	5·4658196	64	4·5877276	5·4329967
65	4·6098443	5·4638057	65	4·5877276	5·4329967	65	4·5644040	5·4004637
66	4·5851892	5·4288400	66	4·5630725	5·3983187	66	4·5397489	5·3660784
67	4·5590673	5·3918835	67	4·5369506	5·3616515	67	4·5136270	5·3297080
68	4·5313324	5·3527969	68	4·5092157	5·3228556	68	4·4858921	5·2912101
69	4·5018271	5·3114335	69	4·4797104	5·2817831	69	4·4563868	5·2504368
70	4·4703834	5·2676392	70	4·4482667	5·2382788	70	4·4249431	5·2072319
71	4·4368221	5·2212517	71	4·4147054	5·1921798	71	4·3913818	5·1614312
72	4·4009531	5·1721016	72	4·3788364	5·1433152	72	4·3555128	5·1128630
73	4·3625755	5·1200107	73	4·3404588	5·0915059	73	4·3171352	5·0613473
74	4·3214774	5·0647919	74	4·2993607	5·0365651	74	4·2760371	5·0066948
75	4·2774358	5·0062487	75	4·2553191	4·9782947	75	4·2319955	4·9487097
76	4·2302169	4·9441771	76	4·2081002	4·9164897	76	4·1847766	4·8871845
77	4·1795761	4·8783609	77	4·1574594	4·8509352	77	4·1341358	4·8219031
78	4·1252575	4·8085775	78	4·1031408	4·7814049	78	4·0798172	4·7526407
79	4·0669946	4·7345918	79	4·0448779	4·7076655	79	4·0215543	4·6791607
80	4·0045098	4·6561576	80	3·9823931	4·6294705	80	3·9590695	4·6012185
81	3·9375146	4·5730197	81	3·9153979	4·5465643	81	3·8920743	4·5185571
82	3·8657095	4·4849123	82	3·8435928	4·4586807	82	3·8202692	4·4309100
83	3·7887842	4·3915577	83	3·7666675	4·3655406	83	3·7433439	4·3379991
84	3·7064172	4·2926660	84	3·6843005	4·2668566	84	3·6609769	4·2395342
85	3·6182765	4·1879379	85	3·5961598	4·1623263	85	3·5728362	4·1352170
86	3·5240186	4·0770600	86	3·5019019	4·0516395	86	3·4785783	4·0247323
87	3·4232895	3·9597090	87	3·4011728	3·9344702	87	3·3778492	3·9077584
88	3·3157241	3·8355485	88	3·2936074	3·8104832	88	3·2702838	3·7839579
89	3·2009463	3·7042278	89	3·1788296	3·6793306	89	3·1555060	3·6529827
90	3·0785692	3·5653873	90	3·0564525	3·5406486	90	3·0331289	3·5144734
91	2·9481949	3·4186525	91	2·9260782	3·3940652	91	2·9027546	3·3680517
92	2·8094145	3·2636335	92	2·7872978	3·2391906	92	2·7639742	3·2133337
93	2·6618083	3·0999261	93	2·6396916	3·0756217	93	2·6163680	3·0499134
94	2·5049454	2·9271075	94	2·4828287	2·9029358	94	2·4595051	2·8773707
95	2·3383842	2·7447310	95	2·3162675	2·7206876	95	2·2929439	2·6952601
96	2·1616722	2·5523177	96	2·1395555	2·5283973	96	2·1162319	2·5031053
97	1·9743457	2·3493345	97	1·9522290	2·3255364	97	1·9289054	2·3003761
98	1·7759304	2·1351560	98	1·7538137	2·1114820	98	1·7304901	2·0864538
99	1·5659406	1·9089829	99	1·5438239	1·8854364	99	1·5205003	1·8605488
100	1·3438801	1·6696636	100	1·3217634	1·6462566	100	1·2984398	1·6215190
101	1·1092416	1·4153006	101	1·0871249	1·3920512	101	1·0638013	1·3674864
102	0·8615068	1·1422987	102	0·8393901	1·1192427	102	0·8160665	1·0948832
103	0·6001465	0·8428650	103	0·5780298	0·8200437	103	0·5547062	0·7959495
104	0·3246207	0·4969573	104	0·3025040	0·4744639	104	0·2791804	0·4506955
105	0·0343781		105	0·0122614		105	9·9889378	
106	9·7288569		106	9·7067402		106	9·6834166	
107	9·4074840		107	9·3853673		107	9·3620437	
108	9·0696756		108	9·0475589		108	9·0242353	
109	8·7148368		109	8·6927201		109	8·6693965	

JOINT LIVES:—Two Females.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	66		67			68		
Age of (x)	$\lambda D_{x,66}$	$\lambda N_{x,66}$	Age of (x)	$\lambda D_{x,67}$	$\lambda N_{x,67}$	Age of (x)	$\lambda D_{x,68}$	$\lambda N_{x,68}$
0	5·4461934	6·3105559	0	5·4200715	6·2694915	0	5·3923366	6·2264542
1	5·3769352	6·2882204	1	5·3508133	6·2467383	1	5·3230784	6·2032609
2	5·3427576	6·2730551	2	5·3166357	6·2313868	2	5·2889008	6·1877131
3	5·3206944	6·2605817	3	5·2945725	6·2188142	3	5·2668376	6·1750355
4	5·3036468	6·2494237	4	5·2775249	6·2076009	4	5·2497900	6·1637617
5	5·2894804	6·2390526	5	5·2633585	6·1972012	5	5·2356236	6·1533310
6	5·2772569	6·2291738	6	5·2511350	6·1873129	6	5·2234001	6·1434298
7	5·2662311	6·2195876	7	5·2401092	6·1777298	7	5·2123743	6·1338485
8	5·2558516	6·2101691	8	5·2297297	6·1683242	8	5·2019948	6·1244540
9	5·2460825	6·2008511	9	5·2199606	6·1590261	9	5·1922257	6·1151754
10	5·2367801	6·1915636	10	5·2106582	6·1497643	10	5·1829233	6·1059385
11	5·2278129	6·1822486	11	5·2016910	6·1404788	11	5·1739561	6·0966820
12	5·2190616	6·1728580	12	5·1929397	6·1311203	12	5·1652048	6·0873551
13	5·2104194	6·1633558	13	5·1842975	6·1216498	13	5·1565626	6·0779174
14	5·2017915	6·1537136	14	5·1756696	6·1120397	14	5·1479347	6·0683391
15	5·1930953	6·1439137	15	5·1669734	6·1022704	15	5·1392385	6·0586006
16	5·1842605	6·1339464	16	5·1581386	6·0923315	16	5·1304037	6·0486903
17	5·1752291	6·1238095	17	5·1491072	6·0822211	17	5·1213723	6·0386063
18	5·1659553	6·1135085	18	5·1398334	6·0719438	18	5·1120985	6·0283536
19	5·1564054	6·1030555	19	5·1302835	6·0615125	19	5·1025486	6·0179441
20	5·1465580	6·0924659	20	5·1204361	6·0509444	20	5·0927012	6·0073957
21	5·1364040	6·0817616	21	5·1102821	6·0402601	21	5·0825472	5·9967318
22	5·1261524	6·0709672	22	5·1000305	6·0294856	22	5·0722956	5·9859767
23	5·1158068	6·0600827	23	5·0896849	6·0186219	23	5·0619500	5·9751330
24	5·1053698	6·0491087	24	5·0792479	6·0076680	24	5·0515130	5·9641997
25	5·0948441	6·0380444	25	5·0687222	5·9966251	25	5·0409873	5·9531772
26	5·0842314	6·0268882	26	5·0581095	5·9854916	26	5·0303746	5·9420646
27	5·0735334	6·0156397	27	5·0474115	5·9742652	27	5·0196766	5·9308615
28	5·0627511	6·0042960	28	5·0366292	5·9629458	28	5·0088943	5·9195644
29	5·0518850	5·9928552	29	5·0257631	5·9515298	29	4·9980282	5·9081726
30	5·0409351	5·9813129	30	5·0148132	5·9400147	30	4·9870783	5·8966827
31	5·0299012	5·9696670	31	5·0037793	5·9283959	31	4·9760444	5·8850911
32	5·0187824	5·9579117	32	4·9926605	5·9166704	32	4·9649256	5·8733940
33	5·0075773	5·9460419	33	4·9814554	5·9048324	33	4·9537205	5·8615865
34	4·9962842	5·9340509	34	4·9701623	5·8928759	34	4·9424274	5·8496628
35	4·9849008	5·9219320	35	4·9587789	5·8807942	35	4·9310440	5·8376163
36	4·9734243	5·9096764	36	4·9473024	5·8685793	36	4·9195675	5·8254399
37	4·9618517	5·8972744	37	4·9357298	5·8562217	37	4·9079949	5·8131244
38	4·9501792	5·8847149	38	4·9240573	5·8437111	38	4·8963224	5·8006597
39	4·9384027	5·8719850	39	4·9122808	5·8310349	39	4·8845459	5·7880346
40	4·9265177	5·8590706	40	4·9003958	5·8181794	40	4·8726609	5·7752353
41	4·9145190	5·8459544	41	4·8883971	5·8051290	41	4·8606622	5·7622465
42	4·9024011	5·8326181	42	4·8762792	5·7918650	42	4·8485443	5·7490515
43	4·8901580	5·8190401	43	4·8640361	5·7783666	43	4·8363012	5·7356291
44	4·8777833	5·8051961	44	4·8516614	5·7646108	44	4·8239265	5·7219570
45	4·8652699	5·7910584	45	4·8391480	5·7505703	45	4·8114131	5·7080094
46	4·8526106	5·7765963	46	4·8264887	5·7362145	46	4·7987538	5·6937557
47	4·8397974	5·7617740	47	4·8136755	5·7215090	47	4·7859406	5·6791622
48	4·8268220	5·7465523	48	4·8007001	5·7064143	48	4·7729652	5·6641905
49	4·8136755	5·7308863	49	4·7875536	5·6908864	49	4·7598187	5·6487961
50	4·8003488	5·7147250	50	4·7742269	5·6748746	50	4·7464920	5·6329291
51	4·7868320	5·6980117	51	4·7607101	5·6583218	51	4·7329752	5·6165325
52	4·7731149	5·6806813	52	4·7469930	5·6411631	52	4·7192581	5·5995415
53	4·7591868	5·6626614	53	4·7330649	5·6233251	53	4·7053300	5·5818819
54	4·7450367	5·6438677	54	4·7189148	5·6047243	54	4·6911799	5·5634689

JOINT LIVES :—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	66			67			68	
Age of (x)	λ $D_{x,\,66}$	λ $N_{x,\,66}$	Age of (x)	λ $D_{x,\,67}$	λ $N_{x,\,67}$	Age of (x)	λ $D_{x,\,68}$	λ $N_{x,\,68}$
55	4·7299896	5·6242062	55	4·7038677	5·5852640	55	4·6761328	5·5442066
56	4·7143629	5·6036619	56	4·6882410	5·5649317	56	4·6605061	5·5240825
57	4·6981307	5·5821712	57	4·6720088	5·5436638	57	4·6442739	5·5030339
58	4·6812560	5·5596625	58	4·6551341	5·5213884	58	4·6273992	5·4809893
59	4·6636911	5·5360571	59	4·6375692	5·4980270	59	4·6098343	5·4578695
60	4·6453772	5·5112687	60	4·6192553	5·4734930	60	4·5915204	5·4335882
61	4·6262444	5·4852045	61	4·6001225	5·4476929	61	4·5723876	5·4080509
62	4·6062123	5·4577640	62	4·5800904	5·4205258	62	4·5523555	5·3811568
63	4·5851892	5·4288400	63	4·5590673	5·3918835	63	4·5313324	5·3527969
64	4·5630725	5·3983187	64	4·5369506	5·3616515	64	4·5092157	5·3228556
65	4·5397489	5·3660784	65	4·5136270	5·3297080	65	4·4858921	5·2912101
66	4·5150938	5·3319920	66	4·4889719	5·2959232	66	4·4612370	5·2577309
67	4·4889719	5·2959232	67	4·4628500	5·2601620	67	4·4351151	5·2222796
68	4·4612370	5·2577309	68	4·4351151	5·2222796	68	4·4073802	5·1847136
69	4·4317317	5·2172641	69	4 4056098	5·1821270	69	4·3778749	5·1448789
70	4·4002880	5·1743667	70	4·3741661	5·1395442	70	4·3464312	5·1026182
71	4·3667267	5·1288734	71	4·3406048	5·0943663	71	4·3128699	5·0577627
72	4·3308577	5·0806114	72	4·3047358	5·0464191	72	4·2770009	5·0101383
73	4·2924801	5·0293993	73	4·2663582	4·9955207	73	4·2386233	4·9595618
74	4·2513820	4·9750479	74	4·2252601	4·9414801	74	4·1975252	4·9058417
75	4·2073404	4·9173584	75	4·1812185	4·8840983	75	4·1534836	4·8487776
76	4·1601215	4·8561250	76	4·1339996	4·8231670	76	4·1062647	4·7881606
77	4·1094807	4·7911297	77	4·0833588	4·7584706	77	4·0556239	4·7237716
78	4·0551621	4·7221467	78	4·0290402	4·6897793	78	4·0013053	4·6553853
79	3·9968992	4·6489402	79	3·9707773	4·6168585	79	3·9430424	4·5827616
80	3·9344144	4·5712640	80	3·9082925	4·5394605	80	3·8805576	4·5056548
81	3·8674192	4·4888604	81	3·8412973	4·4573288	81	3·8135624	4·4238065
82	3·7956141	4·4014633	82	3·7694922	4·3701946	82	3·7417573	4·3369490
83	3·7186888	4·3087942	83	3·6925669	4·2777804	83	3·6648320	4·2448021
84	3·6363218	4·2105636	84	3·6101999	4·1797965	84	3·5824650	4·1470778
85	3·5481811	4·1064700	85	3·5220592	4·0759416	85	3·4943243	4·0434739
86	3·4539232	3·9962029	86	3·4278013	3·9659027	86	3·4000664	3·9336781
87	3·3531941	3·8794359	87	3·3270722	3·8493574	87	3·2993373	3·8173650
88	3·2456287	3·7558353	88	3·2195068	3·7259672	88	3·1917719	3·6942005
89	3·1308509	3·6250510	89	3·1047290	3·5953871	89	3·0769941	3·5638345
90	3·0084738	3·4867223	90	2·9823519	3·4572537	90	2·9546170	3·4259089
91	2·8780995	3·3404768	91	2·8519776	3·3111944	91	2·8242427	3·2800484
92	2·7393191	3·1859256	92	2·7131972	3·1568216	92	2·6854623	3·1258663
93	2·5917129	3·0226663	93	2·5655910	2·9937333	93	2·5378561	2·9629604
94	2·4348500	2·8502767	94	2·4087281	2·8215096	94	2·3809932	2·7909126
95	2·2682888	2·6683151	95	2·2421669	2·6397066	95	2·2144320	2·6092806
96	2·0915768	2·4763040	96	2·0654549	2·4478523	96	2·0377200	2·4175912
97	1·9042503	2·2737180	97	1·8781284	2·2454182	97	1·8503935	2·2153216
98	1·7058350	2·0599404	98	1·6797131	2·0317949	98	1·6519782	2·0018639
99	1·4958452	1·8341828	99	1·4697233	1·8062003	99	1·4419884	1·7764419
100	1·2737847	1·5953187	100	1·2476628	1·5675074	100	1·2199279	1·5379412
101	1·0391462	1·3414721	101	1·0130243	1·3138672	101	0·9852894	1·2845120
102	0·7914114	1·0690944	102	0·7652895	1·0417361	102	0·7375546	1·0126517
103	0·5300511	0·7704396	103	0·5039292	0·7433922	103	0·4761943	0·7146482
104	0·2545253	0·4255668	104	0·2284034	0·3989117	104	0·2006685	0·3706056
105	9·9642827		105	9·9381608		105	9·9104259	
106	9·6587615		106	9·6326296		106	9·6049047	
107	9·3373886		107	9·3112667		107	9·2835318	
108	8·9995802		108	8·9734583		108	8·9457234	
109	8·6447414		109	8·6186195		109	8·5908846	

JOINT LIVES:—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	69		70			71		
Age of (x)	λ $D_{x,\,69}$	λ $N_{x,\,69}$	**Age of (x)**	λ $D_{x,\,70}$	λ $N_{x,\,70}$	**Age of (x)**	λ $D_{x,\,71}$	λ $N_{x,\,71}$
0	5·3628313	6·1813070	0	5·3313876	6·1339022	0	5·2978263	6·0840853
1	5·2935731	6·1576502	1	5·2621294	6·1097600	1	5·2285681	6·0594339
2	5·2593955	6·1418954	2	5·2279518	6·0937876	2	5·1943905	6·0432338
3	5·2373323	6·1291064	3	5·2058886	6·0808807	3	5·1723273	6·0302029
4	5·2202847	6·1177683	4	5·1888410	6·0694735	4	5·1552797	6·0187221
5	5·2061183	6·1073022	5	5·1746746	6·0589694	5	5·1411133	6·0081763
6	5·1938948	6·0973875	6	5·1624511	6·0490373	6	5·1288898	5·9982245
7	5·1828690	6·0878048	7	5·1514253	6·0394530	7	5·1178640	5·9886357
8	5·1724895	6·0784206	8	5·1410458	6·0300760	8	5·1074845	5·9792660
9	5·1627204	6·0691599	9	5·1312767	6·0208330	9	5·0977154	5·9700380
10	5·1534180	6·0599480	10	5·1219743	6·0116444	10	5·0884130	5·9608730
11	5·1444508	6·0507200	11	5·1130071	6·0024452	11	5·0794458	5·9517012
12	5·1356995	6·0414243	12	5·1042558	5·9931804	12	5·0706945	5·9424674
13	5·1270573	6·0320188	13	5·0956136	5·9838075	13	5·0620523	5·9331268
14	5·1184294	6·0224733	14	5·0869857	5·9742938	14	5·0534244	5·9236455
15	5·1097332	6·0127651	15	5·0782895	5·9646174	15	5·0447282	5·9139997
16	5·1008984	6·0028841	16	5·0694547	5·9547648	16	5·0358934	5·9041771
17	5·0918670	5·9928265	17	5·0604233	5·9447343	17	5·0268620	5·8941726
18	5·0825932	5·9825977	18	5·0511495	5·9345292	18	5·0175882	5·8839923
19	5·0730433	5·9722103	19	5·0415996	5·9241635	19	5·0080383	5·8736473
20	5·0631959	5·9616821	20	5·0317522	5·9136549	20	4·9981909	5·8631585
21	5·0530419	5·9510367	21	5·0215982	5·9030287	21	4·9880369	5·8525503
22	5·0427903	5·9403018	22	5·0113466	5·8923123	22	4·9777853	5·8418524
23	5·0324447	5·9294771	23	5·0010010	5·8815068	23	4·9674397	5·8310654
24	5·0220077	5·9185640	24	4·9905640	5·8706127	24	4·9570027	5·8201904
25	5·0114820	5·9075618	25	4·9800383	5·8596305	25	4·9464770	5·8092271
26	5·0008693	5·8964700	26	4·9694256	5·8485589	26	4·9358643	5·7981755
27	4·9901713	5·8852879	27	4·9587276	5·8373977	27	4·9251663	5·7870341
28	4·9793890	5·8740135	28	4·9479453	5·8261448	28	4·9143840	5·7758023
29	4·9685229	5·8626448	29	4·9370792	5·8147985	29	4·9035179	5·7644778
30	4·9575730	5·8511792	30	4·9261293	5·8033566	30	4·8925680	5·7530581
31	4·9465391	5·8396135	31	4·9150954	5·7918154	31	4·8815341	5·7415409
32	4·9354203	5·8279436	32	4·9039766	5·7801716	32	4·8704153	5·7299222
33	4·9242152	5·8161650	33	4·8927715	5·7684208	33	4·8592102	5·7181979
34	4·9129221	5·8042725	34	4·8814784	5·7565579	34	4·8479171	5·7063633
35	4·9015387	5·7922599	35	4·8700950	5·7445772	35	4·8365337	5·6944129
36	4·8900622	5·7801196	36	4·8586185	5·7324719	36	4·8250572	5·6823403
37	4·8784896	5·7678439	37	4·8470459	5·7202336	37	4·8134846	5·6701379
38	4·8668171	5·7554231	38	4·8353734	5·7078539	38	4·8018121	5·6577967
39	4·8550406	5·7428458	39	4·8235969	5·6953220	39	4·7900356	5·6453075
40	4·8431556	5·7300995	40	4·8117119	5·6826257	40	4·7781506	5·6326586
41	4·8311569	5·7171696	41	4·7997132	5·6697512	41	4·7661519	5·6198362
42	4·8190390	5·7040391	42	4·7875953	5·6566823	42	4·7540340	5·6068253
43	4·8067959	5·6906893	43	4·7753522	5·6434003	43	4·7417909	5·5936080
44	4·7944212	5·6770971	44	4·7629775	5·6298844	44	4·7294162	5·5801634
45	4·7819078	5·6632375	45	4·7504641	5·6161090	45	4·7169028	5·5664682
46	4·7692485	5·6490817	46	4·7378048	5·6020460	46	4·7042435	5·5524940
47	4·7564353	5·6345960	47	4·7249916	5·5876633	47	4·6914303	5·5382093
48	4·7434599	5·6197420	48	4·7120162	5·5729229	48	4·6784549	5·5235775
49	4·7303134	5·6044768	49	4·6988697	5·5577818	49	4·6653084	5·5085559
50	4·7169867	5·5887500	50	4·6855430	5·5421906	50	4·6519817	5·4930951
51	4·7034699	5·5725052	51	4·6720262	5·5260924	51	4·6384649	5·4771392
52	4·6897528	5·5556771	52	4·6583091	5·5094227	52	4·6247478	5·4606227
53	4·6758247	5·5381914	53	4·6443810	5·4921064	53	4·6108197	5·4434704
54	4·6616746	5·5199629	54	4·6302309	5·4740571	54	4·5966696	5·4255958

JOINT LIVES:—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	69		70			71		
Age of (r)	λ $D_{x,\,69}$	λ $N_{x,\,69}$	**Age** of (x)	λ $D_{x,\,70}$	λ $N_{x,\,70}$	**Age** of (x)	λ $D_{x,\,71}$	λ $N_{x,\,71}$
55	4·6466275	5·5008931	55	4·6151838	5·4551760	55	4·5816225	5·4068980
56	4·6310008	5·4809737	56	4·5995571	5·4354556	56	4·5659958	5·3873724
57	4·6147686	5·4601404	57	4·5833249	5·4148340	57	4·5497636	5·3669565
58	4·5978939	5·4383229	58	4·5664502	5·3932393	58	4·5328889	5·3455806
59	4·5803290	5·4154418	59	4·5488853	5·3705931	59	4·5153240	5·3231644
60	4·5620151	5·3914103	60	4·5305714	5·3468082	60	4·4970101	5·2996223
61	4·5428823	5·3661343	61	4·5114386	5·3217901	61	4·4778773	5·2748591
62	4·5228502	5·3395117	62	4·4914065	5·2954371	62	4·4578452	5·2487722
63	4·5018271	5·3114335	63	4·4703834	5·2676392	63	4·4368221	5·2212517
64	4·4797104	5·2817831	64	4·4482667	5·2382788	64	4·4147054	5·1921798
65	4·4563868	5·2504368	65	4·4249431	5·2072319	65	4·3913818	5·1614312
66	4·4317317	5·2172641	66	4·4002880	5·1743667	66	4·3667267	5·1288734
67	4·4056098	5·1821270	67	4·3741661	5·1395442	67	4·3406048	5·0943663
68	4·3778749	5·1448789	68	4·3464312	5·1026182	68	4·3128699	5·0577627
69	4·3483696	5·1053685	69	4·3169259	5·0634336	69	4·2833646	5·0189076
70	4·3169259	5·0634336	70	4·2854822	5·0218304	70	4·2519209	4·9776372
71	4·2833646	5·0189076	71	4·2519209	4·9776372	71	4·2183596	4·9337828
72	4·2474956	4·9716130	72	4·2160519	4·9306791	72	4·1824906	4·8871642
73	4·2091180	4·9213660	73	4·1776743	4·8807690	73	4·1441130	4·8375967
74	4·1680199	4·8679746	74	4·1365762	4·8277130	74	4·1030149	4·7848839
75	4·1239783	4·8112371	75	4·0925346	4·7713103	75	4·0589733	4·7288228
76	4·0767594	4·7509441	76	4·0453157	4·7113491	76	4·0117544	4·6692016
77	4·0261186	4·6868748	77	3·9946749	4·6476095	77	3·9611136	4·6057995
78	3·9718000	4·6188024	78	3·9403563	4·5798618	78	3·9067950	4·5383856
79	3·9135371	4·5464881	79	3·8820934	4·5078672	79	3·8485321	4·4667203
80	3·8510523	4·4696836	80	3·8196086	4·4313764	80	3·7860473	4·3905538
81	3·7840571	4·3881314	81	3·7526134	4·3501312	81	3·7190521	4·3096261
82	3·7122520	4·3015619	82	3·6808083	4·2638621	82	3·6472470	4·2236677
83	3·6353267	4·2096965	83	3·6038830	4·1722885	83	3·5703217	4·1323984
84	3·5529597	4·1122432	84	3·5215160	4·0751209	84	3·4879547	4·0355258
85	3·4648190	4·0089033	85	3·4333753	3·9720552	85	3·3998140	3·9327496
86	3·3705611	3·8993619	86	3·3391174	3·8627817	86	3·3055561	3·8237532
87	3·2698320	3·7832960	87	3·2383883	3·7469734	87	3·2048270	3·7082161
88	3·1622666	3·6603674	88	3·1308229	3·6242955	88	3·0972616	3·5857990
89	3·0474888	5·5302304	89	3·0160451	3·4943982	89	2·9824838	3·4561542
90	2·9251117	3·3925236	90	2·8936680	3·3569224	90	2·8601067	3·3189213
91	2·7947374	3·2468733	91	2·7632937	3·2114948	91	2·7297324	3·1737281
92	2·6559570	3·0928939	92	2·6245133	3·0577289	92	2·5909520	3·0201876
93	2·5083508	2·9301827	93	2·4769071	2·8952242	93	2·4433458	2·8578997
94	2·3514879	2·7583213	94	2·3200442	2·7235616	94	2·2864829	2·6864477
95	2·1849267	2·5768698	95	2·1534830	2·5423025	95	2·1199217	2·5053915
96	2·0082147	2·3853578	96	1·9767710	2·3509768	96	1·9432097	2·3142645
97	1·8208882	2·1832633	97	1·7894445	2·1490691	97	1·7558832	2·1125527
98	1·6224729	1·9699831	98	1·5910292	1·9359761	98	1·5574679	1·8996597
99	1·4124831	1·7447450	99	1·3810394	1·7109361	99	1·3474781	1·6748272
100	1·1904226	1·5064455	100	1·1589789	1·4728515	100	1·1254176	1·4369732
101	0·9557841	1·2532556	101	0·9243404	1·2199092	101	0·8907791	1·1842939
102	0·7080493	0·9816691	102	0·6766056	0·9486379	102	0·6430443	0·9133475
103	0·4466890	0·6840370	103	0·4152453	0·6513846	103	0·3816840	0·6165385
104	0·1711632	0·3404838	104	0·1397195	0·3083509	104	0·1061582	0·2740423
105	9·8809206		105	9·8494769		105	9·8159156	
106	9·5753994		106	9·5439557		106	9·5103944	
107	9·2540265		107	9·2225828		107	9·1890215	
108	8·9162181		108	8·8847744		108	8·8512131	
109	8·5613793		109	8·5299356		109	8·4963743	

JOINT LIVES :—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$

Age of (y)	72			73			74	
Age of (x)	λ $D_{x,\,72}$	λ $N_{x,\,72}$	**Age** of (x)	λ $D_{x,\,73}$	λ $N_{x,\,73}$	**Age** of (x)	λ $D_{x,\,74}$	λ $N_{x,\,74}$
0	5·2619573	6·0316920	0	5·2235797	5·9765471	0	5·1824816	5·9184660
1	5·1926991	6·0065075	1	5·1543215	5·9508077	1	5·1132234	5·8921492
2	5·1585215	5·9900692	2	5·1201439	5·9341195	2	5·0790458	5·8752025
3	5·1364583	5·9769082	3	5·0980807	5·9208222	3	5·0569826	5·8617620
4	5·1194107	5·9653494	4	5·0810331	5·9091820	4	5·0399350	5·8500351
5	5·1052443	5·9547590	5	5·0668667	5·8985426	5	5·0257686	5·8393448
6	5·0930208	5·9447846	6	5·0546432	5·8885439	6	5·0135451	5·8293179
7	5·0819950	5·9351887	7	5·0436174	5·8789387	7	5·0025193	5·8197025
8	5·0716155	5·9258240	8	5·0332379	5·8695766	8	4·9921398	5·8103411
9	5·0618464	5·9166113	9	5·0234688	5·8603769	9	4·9823707	5·8011528
10	5·0525440	5·9074673	10	5·0141664	5·8512546	10	4·9730683	5·7920499
11	5·0435768	5·8983236	11	5·0051992	5·8421367	11	4·9641011	5·7829581
12	5·0348255	5·8891201	12	4·9964479	5·8329637	12	4·9553498	5·7738149
13	5·0261833	5·8798113	13	4·9878057	5·8236873	13	4·9467076	5·7645700
14	5·0175554	5·8703623	14	4·9791778	5·8142703	14	4·9380797	5·7551852
15	5·0088592	5·8607482	15	4·9704816	5·8046870	15	4·9293835	5·7456333
16	5·0000244	5·8509542	16	4·9616468	5·7949227	16	4·9205487	5·7358980
17	4·9909930	5·8409767	17	4·9526154	5·7849717	17	4·9115173	5·7259739
18	4·9817192	5·8308198	18	4·9433416	5·7748389	18	4·9022435	5·7158645
19	4·9721693	5·8204967	19	4·9337917	5·7645367	19	4·8926936	5·7055834
20	4·9623219	5·8100269	20	4·9239443	5·7540857	20	4·8828462	5·6951509
21	4·9521679	5·7994367	21	4·9137903	5·7435131	21	4·8726922	5·6845954
22	4·9419163	5·7887566	22	4·9035387	5·7328507	22	4·8624406	5·6739500
23	4·9315707	5·7779880	23	4·8931931	5·7220995	23	4·8520950	5·6632163
24	4·9211337	5·7671311	24	4·8827561	5·7112607	24	4·8416580	5·6523944
25	4·9106080	5·7561866	25	4·8722304	5·7003341	25	4·8311323	5·6414857
26	4·8999953	5·7451539	26	4·8616177	5·6893200	26	4·8205196	5·6304891
27	4·8892973	5·7340323	27	4·8509197	5·6782171	27	4·8098216	5·6194048
28	4·8785150	5·7228204	28	4·8401374	5·6670251	28	4·7990393	5·6082313
29	4·8676489	5·7115170	29	4·8292713	5·6557413	29	4·7881732	5·5969676
30	4·8566990	5·7001191	30	4·8183214	5·6443648	30	4·7772233	5·5856107
31	4·8456651	5·6886244	31	4·8072875	5·6328920	31	4·7661894	5·5741593
32	4·8345463	5·6770298	32	4·7961687	5·6213201	32	4·7550706	5·5626094
33	4·8233412	5·6653311	33	4·7849636	5·6096459	33	4·7438655	5·5509580
34	4·8120481	5·6535234	34	4·7736705	5·5978641	34	4·7325724	5·5392012
35	4·8006647	5·6416019	35	4·7622871	5·5859700	35	4·7211890	5·5273331
36	4·7891882	5·6295602	36	4·7508106	5·5739578	36	4·7097125	5·5153491
37	4·7776156	5·6173915	37	4·7392380	5·5618208	37	4·6981399	5·5032421
38	4·7659431	5·6050874	38	4·7275655	5·5495513	38	4·6864674	5·4910051
39	4·7541666	5·5926382	39	4·7157890	5·5371404	39	4·6746909	5·4786300
40	4·7422816	5·5800334	40	4·7039040	5·5245771	40	4·6628059	5·4661064
41	4·7302829	5·5672605	41	4·6919053	5·5118500	41	4·6508072	5·4534225
42	4·7181650	5·5543042	42	4·6797874	5·4989454	42	4·6386893	5·4405657
43	4·7059219	5·5411476	43	4·6675443	5·4858460	43	4·6264462	5·4275205
44	4·6935472	5·5277709	44	4·6551696	5·4725334	44	4·6140715	5·4142679
45	4·6810338	5·5141509	45	4·6426562	5·4589850	45	4·6015581	5·4007871
46	4·6683745	5·5002616	46	4·6299969	5·4451748	46	4·5888988	5·3870524
47	4·6555613	5·4860704	47	4·6171837	5·4310733	47	4·5760856	5·3730347
48	4·6425859	5·4715421	48	4·6042083	5·4166438	48	4·5631102	5·3586999
49	4·6294394	5·4566349	49	4·5910618	5·4018457	49	4·5499637	5·3440062
50	4·6161127	5·4413000	50	4·5777351	5·3866313	50	4·5366370	5·3289067
51	4·6025959	5·4254806	51	4·5642183	5·3709441	51	4·5231202	5·3133462
52	4·5888788	5·4091125	52	4·5505012	5·3547184	52	4·5094031	5·2972588
53	4·5749507	5·3921193	53	4·5365731	5·3378796	53	4·4954750	5·2805679
54	4·5608006	5·3744140	54	4·5224230	5·3203378	54	4·4813249	5·2631848

JOINT LIVES:—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$

Age of (y)	72			73			74	
Age of (x)	λ $D_{x,\,72}$	λ $N_{x,\,72}$	Age of (x)	λ $D_{x,\,73}$	λ $N_{x,\,73}$	Age of (x)	λ $D_{x,\,74}$	λ $N_{x,\,74}$
55	4·5457535	5·3558942	55	4·5073759	5·3019904	55	4·4662778	5·2450036
56	4·5301268	5·3365578	56	4·4917492	5·2828375	56	4·4506511	5·2260283
57	4·5138946	5·3163430	57	4·4755170	5·2628181	57	4·4344189	5·2061980
58	4·4970199	5·2951795	58	4·4586423	5·2418621	58	4·4175442	5·1854439
59	4·4794550	5·2729895	59	4·4410774	5·2198917	59	4·3999793	5·1636875
60	4·4611411	5·2496850	60	4·4227635	5·1968206	60	4·3816654	5·1408429
61	4·4420083	5·2251722	61	4·4036307	5·1725527	61	4·3625326	5·1168158
62	4·4219762	5·1993479	62	4·3835986	5·1469868	62	4·3425005	5·0915021
63	4·4009531	5·1721016	63	4·3625755	5·1200107	63	4·3214774	5·0647919
64	4·3788364	5·1433152	64	4·3404588	5·0915059	64	4·2993607	5·0365651
65	4·3555128	5·1128630	65	4·3171352	5·0613473	65	4·2760371	5·0066948
66	4·3308577	5·0806114	66	4·2924801	5·0293993	66	4·2513820	4·9750479
67	4·3047358	5·0464191	67	4·2663582	4·9955207	67	4·2252601	4·9414801
68	4·2770009	5·0101383	68	4·2386233	4·9595618	68	4·1975252	4·9058417
69	4·2474956	4·9716130	69	4·2091180	4·9213660	69	4·1680199	4·8679746
70	4·2160519	4·9306791	70	4·1776743	4·8807690	70	4·1365762	4·8277130
71	4·1824906	4·8871642	71	4·1441130	4·8375967	71	4·1030149	4·7848839
72	4·1466216	4·8408905	72	4·1082440	4·7916682	72	4·0671459	4·7393041
73	4·1082440	4·7916682	73	4·0698664	4·7427974	73	4·0287683	4·6907833
74	4·0671459	4·7393041	74	4·0287683	4·6907833	74	3·9876702	4·6391257
75	4·0231043	4·6835909	75	3·9847267	4·6354239	75	3·9436286	4·5841221
76	3·9758854	4·6243168	76	3·9375078	4·5765026	76	3·8964097	4·5255582
77	3·9252446	4·5612597	77	3·8868670	4·5137968	77	3·8457689	4·4632089
78	3·8709260	4·4941879	78	3·8325184	4·4470740	78	3·7914503	4·3968412
79	3·8126631	4·4228605	79	3·7742855	4·3760924	79	3·7331874	4·3262121
80	3·7501783	4·3470272	80	3·7118007	4·3006007	80	3·6707026	4·2510692
81	3·6831831	4·2664275	81	3·6448055	4·2203374	81	3·6037074	4·1711506
82	3·6113780	4·1807903	82	3·5730004	4·1350311	82	3·5319023	4·0861832
83	3·5344527	4·0898349	83	3·4960751	4·0443998	83	3·4549770	3·9958852
84	3·4520857	3·9932696	84	3·4137081	3·9481513	84	3·3726100	3·8999627
85	3·3639450	3·8907909	85	3·3255674	3·8459824	85	3·2844693	3·7981125
86	3·2696871	3·7820876	86	3·2313095	3·7375783	86	3·1902114	3·6900206
87	3·1689580	3·6668295	87	3·1305804	3·6226160	87	3·0894823	3·5753588
88	3·0613926	3·5446855	88	3·0230150	3·5007537	88	2·9819169	3·4537930
89	2·9466148	3·4153052	89	2·9082372	3·3716484	89	2·8671391	3·3249721
90	2·8242377	3·2783272	90	2·7858601	3·2349362	90	2·7447620	3·1885362
91	2·6938634	3·1333789	91	2·6554858	3·0902451	91	2·6143877	3·0441127
92	2·5550830	2·9800757	92	2·5167054	2·9371888	92	2·4756073	2·8913150
93	2·4074768	2·8180159	93	2·3690592	2·7755686	93	2·3280011	2·7297438
94	2·2506139	2·6467839	94	2·2122363	2·6043676	94	2·1711382	2·5589856
95	2·0840527	2·4659432	95	2·0456751	2·4237520	95	2·0045770	2·3786032
96	1·9073407	2·2750254	96	1·8689631	2·2330538	96	1·8278650	2·1881365
97	1·7200142	2·0735208	97	1·6816366	2·0317679	97	1·6405385	1·9870784
98	1·5215989	1·8608367	98	1·4832213	1·8192044	98	1·4421232	1·7748475
99	1·3116091	1·6362260	99	1·2732315	1·5949238	99	1·2321334	1·5507089
100	1·0895486	1·3986118	100	1·0511710	1·3575671	100	1·0100729	1·3136184
101	0·8549101	1·1462211	101	0·8165325	1·1054693	101	0·7754344	1·0618368
102	0·6071753	0·8756168	102	0·5687977	0·8352465	102	0·5276996	0·7919992
103	0·3458150	0·5792461	103	0·3074374	0·5393522	103	0·2663393	0·4966391
104	0·0702892	0·2373929	104	0·0319116	0·1981070	104	9·9908135	0·1560946
105	9·7800166		105	9·7416690		105	9·7005709	
106	9·4745254		106	9·4361478		106	9·3950497	
107	9·1531525		107	9·1147749		107	9·0736768	
108	8·8153441		108	8·7769665		108	8·7358684	
109	8·4605053		109	8·4221277		109	8·3810296	

JOINT LIVES :—Two Females.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	75		76			77		
Age of (x)	$\lambda D_{x,75}$	$\lambda N_{x,75}$	Age of x	$\lambda D_{x,76}$	$\lambda N_{x,76}$	Age of (x)	$\lambda D_{x,77}$	$\lambda N_{x,77}$
0	5·1384400	5·8572553	0	5·0912211	5·7927103	0	5·0405803	5·7246150
1	5·0691818	5·8303371	1	5·0219629	5·7651685	1	4·9713221	5·6964279
2	5·0350042	5·8131224	2	4·9877853	5·7476751	2	4·9371445	5·6786473
3	5·0129410	5·7995342	3	4·9657221	5·7339342	3	4·9150813	5·6647477
4	4·9958934	5·7877165	4	4·9486745	5·7220218	4	4·8980337	5·6527375
5	4·9817270	5·7769713	5	4·9345081	5·7112186	5	4·8838673	5·6418734
6	4·9695035	5·7669142	6	4·9222846	5·7011293	6	4·8716438	5·6317487
7	4·9584777	5·7572852	7	4·9112588	5·6914845	7	4·8606180	5·6220866
8	4·9480982	5·7479233	8	4·9008793	5·6821199	8	4·8502385	5·6127170
9	4 9383291	5·7387449	9	4·8911102	5·6729499	9	4·8404694	5·6035538
10	4·9290267	5·7296607	10	4·8818078	5·6638828	10	4·8311670	5·5945026
11	4·9200595	5·7205936	11	4·8728406	5·6548396	11	4·8221998	5·5854820
12	4·9113082	5·7114794	12	4·8640893	5·6457537	12	4·8134485	5·5764239
13	4·9026660	5·7022660	13	4·8554471	5·6365712	13	4·8048063	5·5672716
14	4·8940381	5·6929131	14	4·8468192	5·6272503	14	4·7961784	5·5579821
15	4·8853119	5·6833924	15	4·8381230	5·6177606	15	4·7874822	5·5485235
16	4·8765071	5·6736865	16	4·8292882	5·6080838	16	4·7786474	5·5388760
17	4·8674757	5·6637888	17	4·8202568	5·5982128	17	4·7696160	5·5290313
18	4·8582019	5·6537033	18	4·8109830	5·5881505	18	4·7603422	5·5189926
19	4·8486520	5·6434424	19	4·8014331	5·5779104	19	4·7507923	5·5087723
20	4·8388046	5·6330283	20	4·7915857	5·5675138	20	4·7409149	5·4983936
21	4·8286506	5·6224894	21	4·7814317	5·5569915	21	4·7307909	5·4878867
22	4·8183990	5·6118607	22	4·7711801	5·5463789	22	4·7205393	5·4772901
23	4·8080534	5·6011435	23	4·7608345	5·5356780	23	4·7101937	5·4666047
24	4·7976164	5·5903390	24	4·7503975	5·5248893	24	4·6997567	5·4558321
25	4·7870907	5·5794468	25	4·7398718	5·5140142	25	4·6892310	5·4449725
26	4·7764780	5·5684680	26	4·7292591	5·5030516	26	4·6786183	5·4340267
27	4·7657800	5·5574011	27	4·7185611	5·4920023	27	4·6679203	5·4229934
28	4·7549977	5·5462460	28	4·7077788	5·4808643	28	4·6571380	5·4118728
29	4·7441316	5·5350007	29	4·6969127	5·4696374	29	4·6462719	5·4006628
30	4·7331817	5·5236637	30	4·6859628	5·4583189	30	4·6353220	5·3893626
31	4·7221478	5·5122321	31	4·6749289	5·4469072	31	4·6242881	5·3779693
32	4·7110290	5·5007037	32	4·6638101	5·4353987	32	4·6131693	5·3664807
33	4·6998239	5·4890745	33	4·6526050	5·4237910	33	4·6019642	5·3548930
34	4·6885308	5·4773405	34	4·6413119	5·4120795	34	4·5906711	5·3432032
35	4·6771474	5·4654980	35	4·6299285	5·4002599	35	4·5792877	5·3314062
36	4·6656709	5·4535404	36	4·6184520	5·3883280	36	4·5678112	5·3194976
37	4·6540983	5·4414622	37	4·6068794	5·3762769	37	4·5562386	5·3074727
38	4·6424258	5·4292560	38	4·5952069	5·3641001	38	4·5445661	5·2953233
39	4·6306493	5·4169141	39	4·5834304	5·3517900	39	4·5327896	5·2830433
40	4·6187643	5·4044273	40	4·5715454	5·3393376	40	4·5209046	5·2706237
41	4·6067656	5·3917849	41	4·5595467	5·3267331	41	4·5089059	5·2580544
42	4·5946477	5·3789728	42	4·5474288	5·3139642	42	4·4967880	5·2453254
43	4·5824046	5·3659778	43	4·5351857	5·3010159	43	4·4845149	5·2324221
44	4·5700299	5·3527822	44	4·5228110	5·2878729	44	4·4721702	5·2193280
45	4·5575165	5·3393645	45	4·5102976	5·2745153	45	4·4596568	5·2060259
46	4·5448572	5·3257013	46	4·4976383	5·2609189	46	4·4469975	5·1924930
47	4·5320440	5·3117634	47	4·4848251	5·2470567	47	4·4341843	5·1787013
48	4·5190686	5·2975174	48	4·4718497	5·2328950	48	4·4212089	5·1646202
49	4·5059221	5·2829238	49	4·4587032	5·2183955	49	4·4080624	5·1502101
50	4·4925954	5·2679345	50	4·4453765	5·2035123	50	4·3947357	5·1354266
51	4·4790786	5·2524950	51	4·4318597	5·1881886	51	4·3812189	5·1202149
52	4·4653615	5·2365401	52	4·4181426	5·1723606	52	4·3675018	5·1045083
53	4·4514334	5·2199928	53	4·4042145	5·1559506	53	4·3535737	5·0882303
54	4·4372833	5·2027618	54	4·3900644	5·1388674	54	4·3394236	5·0712879

ENGLISH LIFE TABLE, No. 3.

JOINT LIVES :—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	75			76			77	
Age of (x)	$\lambda\, D_{x,\,75}$	$\lambda\, N_{x,\,75}$	Age of (x)	$\lambda\, D_{x,\,76}$	$\lambda\, N_{x,\,76}$	Age of (x)	$\lambda\, D_{x,\,77}$	$\lambda\, N_{x,\,77}$
55	4·4222362	5·1847414	55	4·3750173	5·1210011	55	4·3243765	5·0535709
56	4·4066095	5·1659372	56	4·3593906	5·1023620	56	4·3087498	5·0350902
57	4·3903773	5·1462902	57	4·3431584	5·0828912	57	4·2925176	5·0157893
58	4·3735026	5·1257310	58	4·3262838	5·0625215	58	4·2756429	4·9956010
59	4·3559377	5·1041828	59	4·3087188	5·0411743	59	4·2580780	4·9744490
60	4·3376238	5·0815590	60	4·2904049	5·0187650	60	4·2397641	4·9522474
61	4·3184910	5·0577654	61	4·2712722	4·9951989	61	4·2206313	4·9289021
62	4·2984589	5·0326993	62	4·2512400	4·9703729	62	4·2005992	4·9043102
63	4·2774358	5·0062487	63	4·2302169	4·9441771	63	4·1795761	4·8783609
64	4·2553191	4·9782947	64	4·2081003	4·9164897	64	4·1574594	4·8509352
65	4·2319955	4·9487097	65	4·1847766	4·8871845	65	4·1341358	4·8219031
66	4·2073404	4·9173584	66	4·1601215	4·8561250	66	4·1094807	4·7911297
67	4·1812185	4·8840983	67	4·1339996	4·8231670	67	4·0833588	4·7584706
68	4·1534836	4·8487776	68	4·1062647	4·7881606	68	4·0556239	4·7237716
69	4·1239783	4·8112371	69	4·0767594	4·7509441	69	4·0261186	4·6868748
70	4·0925346	4·7713103	70	4·0453157	4·7113491	70	3·9946749	4·6476095
71	4·0589733	4·7288228	71	4·0117544	4·6692016	71	3·9611136	4·6057995
72	4·0231043	4·6835909	72	3·9758854	4·6243168	72	3·9252446	4·5612597
73	3·9847267	4·6354239	73	3·9375079	4·5765026	73	3·8868670	4·5137968
74	3·9436286	4·5841221	74	3·8964097	4·5255582	74	3·8457689	4·4632089
75	3·8995870	4·5294780	75	3·8523681	4·4712741	75	3·8017273	4·4092859
76	3·8523681	4·4712741	76	3·8051492	4·4134335	76	3·7545084	4·3518087
77	3·8017273	4·4092859	77	3·7545084	4·3518087	77	3·7038676	4·2905499
78	3·7474087	4·3432782	78	3·7001898	4·2861646	78	3·6495490	4·2252718
79	3·6891458	4·2730071	79	3·6419269	4·2162562	79	3·5912861	4·1557292
80	3·6266610	4·1982193	80	3·5794421	4·1418287	80	3·5288013	4·0816659
81	3·5596658	4·1186519	81	3·5124469	4·0626181	81	3·4618061	4·0028173
82	3·4878607	4·0340313	82	3·4406418	3·9783504	82	3·3900010	3·9189075
83	3·4109354	3·9440739	83	3·3637165	3·8887416	83	3·3130757	3·8296524
84	3·3285684	3·8484866	84	3·2813496	3·7934956	84	3·2307087	3·7347558
85	3·2404277	3·7469641	85	3·1932088	3·6923092	85	3·1425680	3·6339116
86	3·1461698	3·6391916	86	3·0989509	3·5848659	86	3·0483101	3·5268043
87	3·0454407	3·5248438	87	2·9982218	3·4708383	87	2·9475810	3·4131057
88	2·9378753	3·4035809	88	2·8906564	3·3498887	88	2·8400156	3·2924770
89	2·8230975	3·2750553	89	2·7758786	3·2216672	89	2·7252378	3·1645688
90	2·7007204	3·1389056	90	2·6535015	3·0858134	90	2·6028607	3·0290191
91	2·5703461	2·9947591	91	2·5231272	2·9419540	91	2·4724864	2·8854551
92	2·4315657	2·8422309	92	2·3843168	2·7897033	92	2·3337060	2·7334918
93	2·2839595	2·6809199	93	2·2367406	2·6286627	93	2·1860998	2·5727299
94	2·1270966	2·5104123	94	2·0798777	2·4584172	94	2·0292369	2·4027547
95	1·9605354	2·3302760	95	1·9133166	2·2785348	95	1·8626757	2·2231358
96	1·7838234	2·1400493	96	1·7366045	2·0885560	96	1·6859637	2·0334161
97	1·5964969	1·9392286	97	1·5492781	1·8879845	97	1·4986372	1·8330987
98	1·3980816	1·7272386	98	1·3508627	1·6762445	98	1·3002219	1·6216218
99	1·1880918	1·5033548	99	1·1408729	1·4526235	99	1·0902321	1·3982734
100	0·9660313	1·2665421	100	0·9188124	1·2161052	100	0·8681716	1·1620563
101	0·7313928	1·0150914	101	0·6841739	0·9649946	101	0·6335331	0·9113068
102	0·4836580	0·7456680	102	0·4364391	0·6960067	102	0·3857983	0·6427711
103	0·2222977	0·4508493	103	0·1750789	0·4017623	103	0·1244380	0·3491415
104	9·9467719	0·1110608	104	9·8995530	0·0627699	104	9·8489122	0·0109780
105	9·6565293		105	9·6093104		105	9·5586696	
106	9·3510081		106	9·3037892		106	9·2531484	
107	9·0296352		107	8·9824163		107	8·9317755	
108	8·6918268		108	8·6446079		108	8·5939671	
109	8·3369880		109	8·2897691		109	8·2391283	

JOINT LIVES:—Two Females.

Logarithms of the Series $D_{x, y}$ and $N_{x, y}$.

Age of (y)	78			79			80	
Age of (x)	$\lambda D_{x, 78}$	$\lambda N_{x, 78}$	Age of (x)	$\lambda D_{x, 79}$	$\lambda N_{x, 79}$	Age of (x)	$\lambda D_{x, 80}$	$\lambda N_{x, 80}$
0	4·9862617	5·6527436	0	4·9279988	5·5768588	0	4·8655140	5·4967119
1	4·9170035	5·6238896	1	4·8587406	5·5473172	1	4·7962558	5·4664626
2	4·8828259	5·6058132	2	4·8245630	5·5289363	2	4·7620782	5·4477695
3	4·8607627	5·5917501	3	4·8024998	5·5147055	3	4·7400150	5·4333665
4	4·8437151	5·5796381	4	4·7854522	5·5024887	4	4·7229674	5·4210422
5	4·8295487	5·5687109	5	4·7712858	5·4914952	5	4·7088010	5·4099802
6	4·8173252	5·5585485	6	4·7590623	5·4812934	6	4·6965775	5·3997365
7	4·8062994	5·5488664	7	4·7480365	5·4715893	7	4·6855517	5·3900090
8	4·7959199	5·5394905	8	4·7376570	5·4622047	8	4·6751722	5·3806135
9	4·7861508	5·5303320	9	4·7278879	5·4530500	9	4·6654031	5·3714604
10	4·7768484	5·5212955	10	4·7185855	5·4440259	10	4·6561007	5·3624486
11	4·7678812	5·5122966	11	4·7096183	5·4350478	11	4·6471335	5·3534888
12	4·7591299	5·5032649	12	4·7008670	5·4260419	12	4·6383822	5·3445082
13	4·7504877	5·4941428	13	4·6922248	5·4169487	13	4·6297400	5·3354432
14	4·7418598	5·4848840	14	4·6835969	5·4077208	14	4·6211121	5·3262456
15	4·7331636	5·4754562	15	4·6749007	5·3983230	15	4·6124159	5·3168781
16	4·7243288	5·4658379	16	4·6660659	5·3887337	16	4·6035811	5·3073169
17	4·7152974	5·4560196	17	4·6570345	5·3789420	17	4·5945497	5·2975516
18	4·7060236	5·4460039	18	4·6477607	5·3689494	18	4·5852759	5·2875818
19	4·6964737	5·4358038	19	4·6382108	5·3587688	19	4·5757260	5·2774210
20	4·6866263	5·4254420	20	4·6283634	5·3484239	20	4·5658786	5·2670921
21	4·6764723	5·4149506	21	4·6182094	5·3379472	21	4·5557246	5·2566302
22	4·6662207	5·4043689	22	4·6079578	5·3273806	22	4·5454730	5·2460776
23	4·6558751	5·3936994	23	4·5976122	5·3167252	23	4·5351274	5·2354368
24	4·6454381	5·3829418	24	4·5871752	5·3059832	24	4·5246904	5·2247083
25	4·6349124	5·3720977	25	4·5766495	5·2951537	25	4·5141647	5·2138943
26	4·6242997	5·3611673	26	4·5660368	5·2842382	26	4·5035520	5·2029929
27	4·6136017	5·3501504	27	4·5553388	5·2732365	27	4·4928540	5·1920060
28	4·6028194	5·3390456	28	4·5445565	5·2621479	28	4·4820717	5·1809324
29	4·5919533	5·3278528	29	4·5336904	5·2509708	29	4·4712056	5·1697712
30	4·5810034	5·3165694	30	4·5227405	5·2397046	30	4·4602557	5·1585202
31	4·5699695	5·3051944	31	4·5117066	5·2283460	31	4·4492218	5·1471790
32	4·5588507	5·2937239	32	4·5005878	5·2168942	32	4·4381030	5·1357431
33	4·5476456	5·2821563	33	4·4893827	5·2053443	33	4·4268979	5·1242123
34	4·5363525	5·2704864	34	4·4780896	5·1936949	34	4·4156048	5·1125802
35	4·5249691	5·2587115	35	4·4667062	5·1819399	35	4·4042214	5·1008459
36	4·5134926	5·2468259	36	4·4552297	5·1700762	36	4·3927449	5·0890024
37	4·5019200	5·2348244	37	4·4436571	5·1580982	37	4·3811723	5·0770461
38	4·4902475	5·2227019	38	4·4319846	5·1459993	38	4·3694998	5·0649714
39	4·4784710	5·2104496	39	4·4202081	5·1337746	39	4·3577233	5·0527706
40	4·4665860	5·1980609	40	4·4083231	5·1214141	40	4·3458383	5·0404382
41	4·4545873	5·1855255	41	4·3963244	5·1089106	41	4·3338396	5·0279638
42	4·4424694	5·1728329	42	4·3842065	5·0962529	42	4·3217217	5·0153388
43	4·4302263	5·1599709	43	4·3719634	5·0834291	43	4·3094786	5·0025514
44	4·4178516	5·1469242	44	4·3595887	5·0704254	44	4·2971039	4·9895877
45	4·4053382	5·1336736	45	4·3470753	5·0572247	45	4·2845905	4·9764320
46	4·3926789	5·1201994	46	4·3344160	5·0438051	46	4·2719312	4·9630650
47	4·3798657	5·1064751	47	4·3216028	5·0301430	47	4·2591180	4·9494612
48	4·3668903	5·0924691	48	4·3086274	5·0162087	48	4·2461426	4·9355920
49	4·3537438	5·0781446	49	4·2954809	5·0019642	49	4·2329961	4·9214247
50	4·3404171	5·0634558	50	4·2821542	4·9873664	50	4·2196694	4·9069123
51	4·3269003	5·0483494	51	4·2686374	4·9723602	51	4·2061526	4·8920027
52	4·3131832	5·0327602	52	4·2549203	4·9568818	52	4·1924355	4·8766306
53	4·2992551	5·0166088	53	4·2409922	4·9408525	53	4·1785074	4·8607164
54	4·2851050	4·9998019	54	4·2268421	4·9241759	54	4·1643573	4·8441645

JOINT LIVES :—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	78			79			80	
Age of (x)	λ $D_{x,\,78}$	λ $N_{x,\,78}$	Age of (x)	λ $D_{x,\,79}$	λ $N_{x,\,79}$	Age of (x)	λ $D_{x,\,80}$	λ $N_{x,\,80}$
55	4·2700579	4·9822265	55	4·2117950	4·9067363	55	4·1493102	4·8268558
56	4·2544312	4·9638992	56	4·1961683	4·8885541	56	4·1330535	4·8088130
57	4·2381990	4·9447615	57	4·1799361	4·8695743	57	4·1174513	4·7899824
58	4·2213243	4·9247480	58	4·1630615	4·8497289	58	4·1005766	4·7702996
59	4·2037594	4·9037832	59	4·1454965	4·8289446	59	4·0830117	4·7496876
60	4·1854455	4·8817823	60	4·1271826	4·8071364	60	4·0646978	4·7280655
61	4·1663127	4·8586509	61	4·1080499	4·7842113	61	4·0455650	4·7053393
62	4·1462806	4·8342866	62	4·0880177	4·7600672	62	4·0255329	4·6814068
63	4·1252575	4·8085775	63	4·0669946	4·7345918	63	4·0045098	4·6561576
64	4·1031408	4·7814049	64	4·0448780	4·7076655	64	3·9823931	4·6294705
65	4·0798172	4·7526407	65	4·0215543	4·6791607	65	3·9590695	4·6012185
66	4·0551621	4·7221467	66	3·9968992	4·6489402	66	3·9344144	4·5712640
67	4·0290402	4·6897793	67	3·9707773	4·6168585	67	3·9082925	4·5394605
68	4·0013053	4·6553853	68	3·9430424	4·5827616	68	3·8805576	4·5056548
69	3·9718000	4·6188024	69	3·9135371	4·5464881	69	3·8510523	4·4696836
70	3·9403563	4·5798618	70	3·8820934	4·5078672	70	3·8196086	4·4313764
71	3·9067950	4·5383856	71	3·8485321	4·4667203	71	3·7860473	4·3905538
72	3·8709260	4·4941879	72	3·8126631	4·4228605	72	3·7501783	4·3470272
73	3·8325484	4·4470740	73	3·7742856	4·3760924	73	3·7118007	4·3006007
74	3·7914503	4·3968412	74	3·7331874	4·3262121	74	3·6707026	4·2510692
75	3·7474087	4·3432782	75	3·6891458	4·2730071	75	3·6266610	4·1982193
76	3·7001898	4·2861646	76	3·6419269	4·2162562	76	3·5794421	4·1418287
77	3·6495490	4·2252718	77	3·5912861	4 1557292	77	3·5288013	4·0816659
78	3·5952304	4·1603620	78	3·5369675	4·0911868	78	3·4744827	4·0174907
79	3·5369675	4·0911868	79	3·4787046	4·0223814	79	3·4162198	3·9490537
80	3·4744827	4·0174907	80	3·4162198	3·9490537	80	3·3537350	3·8760965
81	3·4074875	3·9390073	81	3·3492246	3·8709380	81	3·2867398	3·7983495
82	3·3356824	3·8554604	82	3·2774195	3·7877565	82	3·2149347	3·7155354
83	3·2587571	3·7665638	83	3·2004942	3·6992227	83	3·1380094	3·6273669
84	3·1763901	3·6720211	84	3·1181273	3·6050387	84	3·0556424	3·5335446
85	3·0882494	3·5715260	85	3·0299865	3·5048974	85	2·9675017	3·4337612
86	2·9939915	3·4647610	86	2·9357286	3·3984799	86	2·8732438	3·3276964
87	2·8932624	3·3513980	87	2·8349995	3·2854588	87	2·7725147	3·2150216
88	2·7856970	3·2310978	88	2·7274341	3·1654933	88	2·6649493	3·0953965
89	2·6709192	3·1035098	89	2·6126563	3·0382330	89	2·5501715	2·9684694
90	2·5485421	2·9682733	90	2·4902792	2·9033152	90	2·4277944	2·8338773
91	2·4181678	2·8250131	91	2·3599049	2·7603675	91	2·2974201	2·6912469
92	2·2793874	2·6733444	92	2·2211245	2·6090018	92	2·1586397	2·5401918
93	2·1317812	2·5128698	93	2·0735183	2·4488207	93	2·0110335	2·3803126
94	1·9749183	2·3431736	94	1·9166554	2·2794119	94	1·8541706	2·2111970
95	1·8083571	2·1638269	95	1·7500943	2·1003444	95	1·6876094	2·0324169
96	1·6316451	1·9743735	96	1·5733822	1·9111667	96	1·5108974	1·8435193
97	1·4443186	1·7743220	97	1·3860558	1·7113871	97	1·3235709	1·6440218
98	1·2459033	1·5631095	98	1·1876404	1·5004533	98	1·1251556	1·4333697
99	1·0359135	1·3400493	99	0·9776506	1·2776757	99	0·9151658	1·2108961
100	0·8138530	1·1041422	100	0·7555901	1·0421028	100	0·6931053	0·9756386
101	0·5792145	0·8537590	101	0·5209516	0·7920974	101	0·4584668	0·7260504
102	0·3314797	0·5857088	102	0·2732168	0·5245259	102	0·2107320	0·4589701
103	0·0701194	0·2926990	103	0·0118566	0·2322081	103	9·9493717	0·1673469
104	9·7945936	$\bar{1}$·9554472	104	9·7363307	$\bar{1}$·8958644	104	9·6738159	$\bar{1}$·8319977
105	9·5043510		105	9·4460881		105	9·3836033	
106	9·1988298		106	9·1405669		106	9·0780821	
107	8·8774569		107	8·8191940		107	8·7567092	
108	8·5396485		108	8·4813856		108	8·4189008	
109	8·1848097		109	8·1265468		109	8·0640620	

JOINT LIVES:—Two Females.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	81			82			83	
Age of (x)	$\lambda D_{x,81}$	$\lambda N_{x,81}$	Age of (x)	$\lambda D_{x,82}$	$\lambda N_{x,82}$	Age of x	$\lambda D_{x,83}$	$\lambda N_{x,83}$
0	4·7985188	5·4120428	0	4·7267137	5·3225798	0	4·6497884	5·2280396
1	4·7292606	5·3810670	1	4·6574555	5·2908592	1	4·5805302	5·1955568
2	4·6950830	5·3620540	2	4·6232779	5·2715200	2	4·5463526	5·1758850
3	4·6730198	5·3474754	3	4·6012147	5·2567617	3	4·5242894	5·1609449
4	4·6559722	5·3350404	4	4·5841671	5·2442143	4	4·5072418	5·1482820
5	4·6418058	5·3239081	5	4·5700007	5·2330091	5	4·4930754	5·1370029
6	4·6295823	5·3136209	6	4·5577772	5·2226767	6	4·4808519	5·1266232
7	4·6185565	5·3038675	7	4·5467514	5·2128966	7	4·4698261	5·1168142
8	4·6081770	5·2944600	8	4·5363719	5·2034746	8	4·4594466	5·1073776
9	4·5984079	5·2853063	9	4·5266028	5·1943194	9	4·4496775	5·0982186
10	4·5891055	5·2763044	10	4·5173004	5·1853254	10	4·4403751	5·0892316
11	4·5801383	5·2673636	11	4·5083332	5·1764009	11	4·4314079	5·0803220
12	4·5713870	5·2584057	12	4·4995819	5·1674668	12	4·4226566	5·0714092
13	4·5627448	5·2493689	13	4·4909397	5·1584557	13	4·4140144	5·0624249
14	4·5541169	5·2402005	14	4·4823118	5·1493168	14	4·4053865	5·0533128
15	4·5454207	5·2308629	15	4·4736156	5·1400081	15	4·3966903	5·0440338
16	4·5365859	5·2213303	16	4·4647808	5·1305039	16	4·3878555	5·0345570
17	4·5275545	5·2115904	17	4·4557494	5·1207898	17	4·3788241	5·0248688
18	4·5182807	5·2016437	18	4·4464756	5·1108654	18	4·3695503	5·0149663
19	4·5087308	5·1915019	19	4·4369257	5·1007426	19	4·3600004	5·0048625
20	4·4988834	5·1811897	20	4·4270783	5·0904461	20	4·3501530	4·9945811
21	4·4887294	5·1707413	21	4·4169243	5·0800117	21	4·3399990	4·9841599
22	4·4784778	5·1602028	22	4·4066727	5·0694861	22	4·3297474	4·9736478
23	4·4681322	5·1495754	23	4·3963271	5·0588722	23	4·3194018	4·9630461
24	4·4576952	5·1388611	24	4·3858901	5·0481710	24	4·3089648	4·9523579
25	4·4471695	5·1280599	25	4·3753644	5·0373835	25	4·2984391	4·9415830
26	4·4365568	5·1171738	26	4·3647517	5·0265100	26	4·2878264	4·9307230
27	4·4258588	5·1062004	27	4·3540537	5·0155518	27	4·2771284	4·9197766
28	4·4150765	5·0951415	28	4·3432714	5·0045058	28	4·2663461	4·9087455
29	4·4042104	5·0839951	29	4·3324053	4·9933736	29	4·2554800	4·8976266
30	4·3932605	5·0727600	30	4·3214554	4·9821532	30	4·2445301	4·8864196
31	4·3822266	5·0614337	31	4·3104215	4·9708427	31	4·2334962	4·8751238
32	4·3711078	5·0500154	32	4·2993027	4·9594392	32	4·2223774	4·8637362
33	4·3599027	5·0385001	33	4·2880976	4·9479412	33	4·2111723	4·8522530
34	4·3486096	5·0268874	34	4·2768045	4·9363443	34	4·1998792	4·8406731
35	4·3372262	5·0151703	35	4·2654211	4·9246462	35	4·1884958	4·8289910
36	4·3257497	5·0033477	36	4·2539446	4·9128409	36	4·1770193	4·8172043
37	4·3141771	4·9914118	37	4·2423720	4·9009262	37	4·1654467	4·8053071
38	4·3025046	4·9793585	38	4·2306995	4·8888935	38	4·1537742	4·7932958
39	4·2907281	4·9671823	39	4·2189230	4·8767390	39	4·1419977	4·7811620
40	4·2788431	4·9548742	40	4·2070380	4·8644559	40	4·1301127	4·7689007
41	4·2668444	4·9424287	41	4·1950393	4·8520351	41	4·1181140	4·7565053
42	4·2547265	4·9298336	42	4·1829214	4·8394699	42	4·1059961	4·7439658
43	4·2424834	4·9170799	43	4·1706783	4·8267471	43	4·0937530	4·7312736
44	4·2301087	4·9041543	44	4·1583036	4·8138564	44	4·0813783	4·7184153
45	4·2175953	4·8910410	45	4·1457902	4·8007830	45	4·0688649	4·7053787
46	4·2049360	4·8777214	46	4·1331309	4·7875087	46	4·0562056	4·6921460
47	4·1921228	4·8641734	47	4·1203177	4·7740108	47	4·0433924	4·6786968
48	4·1791474	4·8503675	48	4·1073423	4·7602641	48	4·0304170	4·6650037
49	4·1660009	4·8362703	49	4·0941958	4·7462340	49	4·0172705	4·6510366
50	4·1526742	4·8218390	50	4·0808691	4·7318787	50	4·0039438	4·6367536
51	4·1391574	4·8070206	51	4·0673523	4·7171468	51	3·9904270	4·6221030
52	4·1254403	4·7917496	52	4·0536352	4·7019727	52	3·9767099	4·6070205
53	4·1115122	4·7759467	53	4·0397071	4·6862760	53	3·9627818	4·5914249
54	4·0973621	4·7595130	54	4·0255570	4·6699562	54	3·9486317	4·5752139

JOINT LIVES:—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	81		82			83		
Age of ( )	$\lambda\ D_{x,\,81}$	$\lambda\ N_{x,\,81}$	Age of (r)	$\lambda\ D_{x,\,82}$	$\lambda\ N_{x,\,82}$	Age of (x)	$\lambda\ D_{x,\,83}$	$\lambda\ N_{x,\,83}$
55	4·0823150	4·7423291	55	4·0105099	4·6528891	55	3·9335846	4·5582604
56	4·0666883	4·7244200	56	3·9948832	4·6351081	56	3·9179579	4·5405997
57	4·0504561	4·7057329	57	3·9786510	4·6165579	57	3·9017257	4·5221804
58	4·0335814	4·6862035	58	3·9617763	4·5971762	58	3·8848510	4·5029396
59	4·0160165	4·6657592	59	3·9442114	4·5768899	59	3·8672861	4·4828053
60	3·9977026	4·6443146	60	3·9258975	4·5556173	60	3·8489722	4·4616959
61	3·9785698	4·6217796	61	3·9067647	4·5332657	61	3·8298394	4·4395204
62	3·9585377	4·5980514	62	3·8867326	4·5097344	62	3·8098073	4·4161775
63	3·9375146	4·5730197	63	3·8657095	4·4849123	63	3·7887842	4·3915577
64	3·9153979	4·5465643	64	3·8435928	4·4586807	64	3·7666675	4·3655406
65	3·8920743	4·5185571	65	3·8202692	4·4309100	65	3·7433439	4·3379991
66	3·8674192	4·4888604	66	3·7956141	4·4014633	66	3·7186888	4·3087942
67	3·8412973	4·4573288	67	3·7694922	4·3701946	67	3·6925669	4·2777804
68	3·8135624	4·4238065	68	3·7417573	4·3369490	68	3·6648320	4·2448021
69	3·7840571	4·3881314	69	3·7122520	4·3015619	69	3·6353267	4·2096965
70	3·7526134	4·3501312	70	3·6808083	4·2638621	70	3·6038830	4·1722885
71	3·7190521	4·3096261	71	3·6472470	4·2236677	71	3·5703217	4·1323984
72	3·6831831	4·2664275	72	3·6113780	4·1807903	72	3·5344527	4·0898349
73	3·6448055	4·2203374	73	3·5730004	4·1350311	73	3·4960751	4·0443998
74	3·6037074	4·1711506	74	3·5319023	4·0861832	74	3·4549770	3·9958852
75	3·5596658	4·1186519	75	3·4878607	4·0340313	75	3·4109354	3·9440739
76	3·5124469	4·0626181	76	3·4406418	3·9783504	76	3·3637165	3·8887416
77	3·4618061	4·0028173	77	3·3900010	3·9189075	77	3·3130757	3·8296524
78	3·4074875	3·9390073	78	3·3356824	3·8554604	78	3·2587571	3·7665638
79	3·3492246	3·8709380	79	3·2774195	3·7877565	79	3·2004942	3·6992227
80	3·2867398	3·7983495	80	3·2149347	3·7155354	80	3·1380094	3·6273669
81	3·2197446	3·7209725	81	3·1479395	3·6385272	81	3·0710142	3·5507247
82	3·1479395	3·6385272	82	3·0761344	3·5564508	82	2·9992091	3·4690162
83	3·0710142	3·5507247	83	2·9992091	3·4690162	83	2·9222838	3·3819486
84	2·9886472	3·4572673	84	2·9168421	3·3759234	84	2·8399168	3·2892212
85	2·9005065	3·3578440	85	2·8287014	3·2768622	85	2·7517761	3·1905230
86	2·8062486	3·2521355	86	2·7344435	3·1715123	86	2·6575182	3·0855328
87	2·7055195	3·1398111	87	2·6337144	3·0595422	87	2·5567891	2·9739186
88	2·5979541	3·0205303	88	2·5261490	2·9406096	88	2·4492237	2·8553074
89	2·4831763	2·8939414	89	2·4113712	2·8143621	89	2·3344459	2·7294353
90	2·3607992	2·7596815	90	2·2889941	2·6804370	90	2·2120688	2·5958488
91	2·2304249	2·6173736	91	2·1586198	2·5384594	91	2·0816945	2·4542029
92	2·0916445	2·4666348	92	2·0198394	2·3880390	92	1·9429141	2·3041102
93	1·9440383	2·3070635	93	1·8722332	2·2287822	93	1·7953079	2·1451693
94	1·7871754	2·1382483	94	1·7153703	2·0602743	94	1·6384450	1·9769714
95	1·6206142	1·9597609	95	1·5488091	1·8820860	95	1·4718838	1·7990895
96	1·4439022	1·7711530	96	1·3720971	1·6937709	96	1·2951718	1·6110730
97	1·2565757	1·5719381	97	1·1847706	1·4948500	97	1·1078453	1·4124471
98	1·0581604	1·3615806	98	0·9863553	1·2847826	98	0·9094300	1·2026844
99	0·8481706	1·1394068	99	0·7763655	1·0629278	99	0·6994402	0·9811342
100	0·6261101	0·9044992	100	0·5543050	0·8283769	100	0·4773797	0·7469299
101	0·3914716	0·6552921	101	0·3196665	0·5797778	101	0·2427412	0·4985587
102	0·1437368	0·3887759	102	0·0719317	0·3135720	102	9·9950064	0·2331231
103	9·8823765	0·0978471	103	9·8105714	0·0234582	103	9·7336461	1̄·9437418
104	9·6068507	1̄·7635029	104	9·5350456	1̄·6901961	104	9·4581203	1̄·6117233
105	9·3166081		105	9·2448030		105	9·1678777	
106	9·0110869		106	8·9392818		106	8·8623565	
107	8·6897140		107	8·6179089		107	8·5409836	
108	8·3519056		108	8·2801005		108	8·2031752	
109	7·9970668		109	7·9252617		109	7·8483364	

JOINT LIVES :—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	84			85			86	
Age of (x)	$\lambda\ D_{x,\,84}$	$\lambda\ N_{x,\,84}$	Age of (x)	$\lambda\ D_{x,\,85}$	$\lambda\ N_{x,\,85}$	Age of (x)	$\lambda\ D_{x,\,86}$	$\lambda\ N_{x,\,86}$
0	4·5674214	5·1281268	0	4·4792807	5·0225332	0	4·3850228	4·9109407
1	4·4981632	5·0948654	1	4·4100225	4·9884791	1	4·3157646	4·8760786
2	4·4639856	5·0748556	2	4·3758449	4·9681260	2	4·2815870	4·8553786
3	4·4419224	5·0597308	3	4·3537817	4·9528143	3	4·2595238	4·8398782
4	4·4248748	5·0469515	4	4·3367341	4·9399169	4	4·2424762	4·8268617
5	4·4107084	5·0355962	5	4·3225677	4·9284849	5	4·2283098	4·8153519
6	4·3984849	5·0251686	6	4·3103442	4·9180078	6	4·2160863	4·8048241
7	4·3874591	5·0153291	7	4·2993184	4·9081369	7	4·2050605	4·7949207
8	4·3770796	5·0058748	8	4·2889389	4·8986638	8	4·1946810	4·7854281
9	4·3673105	4·9967121	9	4·2791698	4·8894939	9	4·1849119	4·7762500
10	4·3580081	4·9877302	10	4·2698674	4·8805175	10	4·1756095	4·7672754
11	4·3490409	4·9788345	11	4·2609002	4·8716342	11	4·1666423	4·7584047
12	4·3402896	4·9699417	12	4·2521489	4·8627603	12	4·1578910	4·7495485
13	4·3316474	4·9609819	13	4·2435067	4·8538241	13	4·1492488	4·7406351
14	4·3230195	4·9518983	14	4·2348788	4·8447666	14	4·1406209	4·7316033
15	4·3143233	4·9426459	15	4·2261826	4·8355434	15	4·1319247	4·7224061
16	4·3054885	4·9331977	16	4·2173478	4·8261202	16	4·1230899	4·7130115
17	4·2964571	4·9235341	17	4·2083164	4·8164826	17	4·1140585	4·7033963
18	4·2871833	4·9136544	18	4·1990426	4·8066242	18	4·1047847	4·6935599
19	4·2776334	4·9035685	19	4·1894927	4·7965570	19	4·0952348	4·6835108
20	4·2677860	4·8933023	20	4·1796453	4·7863048	20	4·0853874	4·6732735
21	4·2576320	4·8828938	21	4·1694913	4·7759089	21	4·0752334	4·6628881
22	4·2473804	4·8723940	22	4·1592397	4·7654212	22	4·0649818	4·6524126
23	4·2370348	4·8618055	23	4·1488941	4·7548442	23	4·0546362	4·6418477
24	4·2265978	4·8511287	24	4·1384571	4·7441803	24	4·0441992	4·6311941
25	4·2160721	4·8403665	25	4·1279314	4·7334292	25	4·0336735	4·6204557
26	4·2054594	4·8295186	26	4·1173187	4·7225936	26	4·0230608	4·6096307
27	4·1947614	4·8185855	27	4·1066207	4·7116723	27	4·0123628	4·5987216
28	4·1839791	4·8075662	28	4·0958384	4·7006657	28	4·0015805	4·5877267
29	4·1731130	4·7964612	29	4·0849723	4·6895725	29	3·9907144	4·5766453
30	4·1621631	4·7852679	30	4·0740224	4·6783927	30	3·9797645	4·5654773
31	4·1511292	4·7739853	31	4·0629885	4·6671231	31	3·9687306	4·5542208
32	4·1400104	4·7626119	32	4·0518697	4·6557635	32	3·9576118	4·5428740
33	4·1288053	4·7511444	33	4·0406646	4·6443095	33	3·9464067	4·5314339
34	4·1175122	4·7395795	34	4·0293715	4·6327599	34	3·9351136	4·5198979
35	4·1061288	4·7279144	35	4·0179881	4·6211097	35	3·9237302	4·5082630
36	4·0946523	4·7161436	36	4·0065116	4·6093564	36	3·9122537	4·4965243
37	4·0830797	4·7042647	37	3·9949390	4·5974937	37	3·9006811	4·4846784
38	4·0714072	4·6922713	38	3·9832665	4·5855182	38	3·8890086	4·4727199
39	4·0596307	4·6801587	39	3·9714900	4·5734242	39	3·8772321	4·4606435
40	4·0477457	4·6679188	40	3·9596050	4·5612050	40	3·8653471	4·4484435
41	4·0357470	4·6555456	41	3·9476063	4·5488536	41	3·8533484	4·4361127
42	4·0236291	4·6430320	42	3·9354884	4·5363627	42	3·8412305	4·4236438
43	4·0113860	4·6303658	43	3·9232453	4·5237231	43	3·8289874	4·4110279
44	3·9990113	4·6175387	44	3·9108706	4·5109240	44	3·8166127	4·3982555
45	3·9864979	4·6045361	45	3·8983572	4·4979531	45	3·8040993	4·3853141
46	3·9738386	4·5913424	46	3·8856979	4·4847954	46	3·7914400	4·3721900
47	3·9610254	4·5779374	47	3·8728847	4·4714318	47	3·7786268	4·3588645
48	3·9480500	4·5642962	48	3·8599093	4·4578385	48	3·7656514	4·3453157
49	3·9349035	4·5503878	49	3·8467628	4·4439852	49	3·7525049	4·3315139
50	3·9215768	4·5361723	50	3·8334361	4·4298332	50	3·7391782	4·3174219
51	3·9080600	4·5215992	51	3·8199193	4·4153331	51	3·7256614	4·3029903
52	3·8943129	4·5066039	52	3·8062022	4·4004204	52	3·7119143	4·2881560
53	3·8804148	4·4911045	53	3·7922741	4·3850130	53	3·6980162	4·2728359
54	3·8662647	4·4749976	54	3·7781240	4·3690047	54	3·6838661	4·2569223

JOINT LIVES :—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	84		85			86		
Age of (x)	λ $D_{x,\,84}$	λ.$N_{x,\,84}$	Age of (x)	λ $D_{x,\,85}$	$N_{x,\,85}$	Age of (x)	λ $D_{x,\,86}$	λ $N_{x,\,86}$
55	3·8512176	4·4581511	55	3·7630769	4·3522605	55	3·6688190	4·2402746
56	3·8355909	4·4406059	56	3·7474502	4·3348247	56	3·6531923	4·2229435
57	3·8193587	4·4223104	57	3·7312180	4·3166477	57	3·6369601	4·2048785
58	3·8024840	4·4032041	58	3·7143433	4·2976686	58	3·6200854	4·1860210
59	3·7849191	4·3832149	59	3·6967784	4·2778177	59	3·6025205	4·1663011
60	3·7666052	4·3622619	60	3·6784645	4·2570141	60	3·5842066	4·1456398
61	3·7474724	4·3402543	61	3·6593317	4·2351675	61	3·5650738	4·1239470
62	3·7274403	4·3170927	62	3·6392996	4·2121783	62	3·5450417	4·1011234
63	3·7064172	4·2926660	63	3·6182765	4·1879379	63	3·5240186	4·0770600
64	3·6843005	4·2668566	64	3·5961598	4·1623263	64	3·5019019	4·0516395
65	3·6609769	4·2395342	65	3·5728362	4·1352170	65	3·4785783	4·0247323
66	3·6363218	4·2105636	66	3·5481811	4·1064700	66	3·4539232	3·9962029
67	3·6101999	4·1797965	67	3·5220592	4·0759416	67	3·4278013	3·9659027
68	3·5824650	4·1470778	68	3·4943243	4·0434739	68	3·4000664	3·9336781
69	3·5529597	4·1122432	69	3·4648190	4·0089033	69	3·3705611	3·8993619
70	3·5215160	4·0751209	70	3·4333753	3·9720552	70	3·3391174	3·8627817
71	3·4879547	4·0355258	71	3·3998140	3·9327496	71	3·3055561	3·8237532
72	3·4520857	3·9932696	72	3·3639450	3·8907909	72	3·2696871	3·7820876
73	3·4137081	3·9481513	73	3·3255674	3·8459824	73	3·2313095	3·7375783
74	3·3726100	3·8999627	74	3·2844693	3·7981125	74	3·1902114	3·6900206
75	3·3285684	3·8484866	75	3·2404277	3·7469641	75	3·1461698	3·6391916
76	3·2813495	3·7934956	76	3·1932088	3·6923092	76	3·0989509	3·5848659
77	3·2307087	3·7347558	77	3·1425680	3·6339116	77	3·0483101	3·5268043
78	3·1763901	3·6720211	78	3·0882494	3·5715260	78	2·9939915	3·4647610
79	3·1181272	3·6050387	79	3·0299865	3·5048974	79	2·9357286	3·3984799
80	3·0556424	3·5335446	80	2·9675017	3·4337612	80	2·8732438	3·3276964
81	2·9886472	3·4572673	81	2·9005065	3·3578440	81	2·8062486	3·2521355
82	2·9168421	3·3759234	82	2·8287014	3·2768622	82	2·7344435	3·1715123
83	2·8399168	3·2892212	83	2·7517761	3·1905230	83	2·6575182	3·0855328
84	2·7575498	3·1968587	84	2·6694091	3·0985236	84	2·5751512	2·9938932
85	2·6694091	3·0985236	85	2·5812684	3·0005503	85	2·4870105	2·8962803
86	2·5751512	2·9938932	86	2·4870105	2·8962803	86	2·3927526	2·7923686
87	2·4744221	2·8826356	87	2·3862814	2·7853790	87	2·2920235	2·6818235
88	2·3668567	2·7644071	88	2·2787160	2·6675034	88	2·1844581	2·5643003
89	2·2520789	2·6388535	89	2·1639382	2·5422988	89	2·0696803	2·4394432
90	2·1297018	2·5056085	90	2·0415611	2·4093988	90	1·9473032	2·3068876
91	1·9993275	2·3642979	91	1·9111868	2·2684244	91	1·8169289	2·1662546
92	1·8605471	2·2145329	92	1·7724064	2·1189911	92	1·6781485	2·0171540
93	1·7129409	2·0559163	93	1·6248002	1·9606976	93	1·5305423	1·8591881
94	1·5560780	1·8880312	94	1·4679373	1·7931350	94	1·3736794	1·6919430
95	1·3895168	1·7104559	95	1·3013761	1·6158680	95	1·2071182	1·5149978
96	1·2128048	1·5227467	96	1·1246641	1·4284620	96	1·0304062	1·3278961
97	1·0254783	1·3244224	97	0·9373376	1·2304489	97	0·8430797	1·1301826
98	0·8270630	1·1149611	98	0·7389223	1·0212968	98	0·6446644	0·9213535
99	0·6170732	0·8937396	99	0·5289325	0·8003871	99	0·4346746	0·7007729
100	0·3950127	0·6598687	100	0·3068720	0·5668969	100	0·2126141	0·4676229
101	0·1603742	0·4119562	101	0·0722335	0·3193768	101	9·9779756	0·2205788
102	9·9126394	0·1470577	102	9·8244987	0·0551106	102	9·7302408	$\bar{1}$·9567925
103	9·6512791	$\bar{1}$·8584770	103	9·5631384	$\bar{1}$·7673043	103	9·4688805	$\bar{1}$·6699674
104	9·3757533	$\bar{1}$·5275010	104	9·2876126	$\bar{1}$·4375920	104	9·1933547	$\bar{1}$·3414345
105	9·0855107		105	8·9973700		105	8·9031121	
106	8·7799895		106	8·6918488		106	8·5975909	
107	8·4586166		107	8·3704759		107	8·2762180	
108	8·1208082		108	8·0326675		108	7·9384096	
109	7·7659694		109	7·6778287		109	7·5835708	

JOINT LIVES :—Two Females.

Logarithms of the Series $D_{x,\ y}$ and $N_{x,\ y}$.

Age of (y)	87			88			89	
Age of (x)	$\lambda\ D_{x,\ 87}$	$\lambda\ N_{x,\ 87}$	**Age** of (x)	$\lambda\ D_{x,\ 88}$	$\lambda\ N_{x,\ 88}$	**Age** of (x)	$\lambda\ D_{x,\ 89}$	$\lambda\ N_{x,\ 89}$
0	4·2842937	4·7930161	0	4·1767283	4·6684158	0	4·0619505	4·5367831
1	4·2150355	4·7573345	1	4·1074701	4·6319032	1	3·9926923	4·4994286
2	4·1808579	4·7362825	2	4·0732925	4·6104973	2	3·9585147	4·4776658
3	4·1587947	4·7205925	3	4·0512293	4·5946157	3	3·9364515	4·4615931
4	4·1417471	4·7074561	4	4·0341817	4·5813590	4	3·9194039	4·4482148
5	4·1275807	4·6958677	5	4·0200153	4·5696911	5	3·9052375	4·4364678
6	4·1153572	4·6852893	6	4·0077918	4·5590611	6	3·8930140	4·4257859
7	4·1043314	4·6753521	7	3·9967660	4·5490901	7	3·8819882	4·4157802
8	4·0939519	4 6658380	8	3·9863865	4·5395537	8	3·8716087	4·4062211
9	4·0841828	4·6566520	9	3·9766174	4·5303572	9	3·8618396	4·3970125
10	4·0748804	4·6476773	10	3·9673150	4·5213834	10	3·8525372	4·3880383
11	4·0659132	4·6388156	11	3·9583478	4·5125301	11	3·8435700	4·3791918
12	4·0571619	4·6299781	12	3·9495965	4·5037064	12	3·8348187	4·3703826
13	4·0485197	4·6210859	13	3·9409543	4·4948355	13	3·8261765	4·3615311
14	4·0398918	4·6120789	14	3·9323264	4·4858526	14	3·8175486	4·3525715
15	4·0311956	4·6029082	15	3·9236302	4·4767076	15	3·8088524	4·3434510
16	4·0223608	4·5935386	16	3·9147954	4·4673634	16	3·8000176	4·3341317
17	4·0133294	4·5839499	17	3·9057640	4·4577977	17	3·7909862	4·3245894
18	4·0040556	4·5741332	18	3·8964902	4·4480034	18	3·7817124	4·3148155
19	3·9945057	4·5641016	19	3·8869403	4·4379885	19	3·7721625	4·3048178
20	3·9846583	4·5538780	20	3·8770929	4·4277788	20	3·7623151	4·2946212
21	3·9745043	4·5435049	21	3·8669389	4·4174165	21	3·7521611	4·2842699
22	3·9642527	4·5330401	22	3·8566873	4·4069626	22	3·7419095	4·2738258
23	3·9539071	4·5224860	23	3·8463417	4·3964189	23	3·7315639	4·2632928
24	3·9434701	4·5118442	24	3·8359047	4·3857877	24	3·7211269	4·2526716
25	3·9329444	4·5011161	25	3·8253790	4·3750701	25	3·7106012	4·2419638
26	3·9223317	4·4903027	26	3·8147663	4·3642668	26	3·6999885	4·2311710
27	3·9116337	4·4794038	27	3·8040683	4·3533791	27	3·6892905	4·2202930
28	3·9008514	4·4684199	28	3·7932860	4·3424059	28	3·6785082	4·2093305
29	3·8899853	4·4573504	29	3·7824199	4·3313471	29	3·6676421	4·1982823
30	3·8790354	4·4461943	30	3·7714700	4·3202022	30	3·6566922	4·1871478
31	3·8680015	4·4349498	31	3·7604361	4·3089693	31	3·6456583	4·1759259
32	3·8568827	4·4236153	32	3·7493173	4·2976467	32	3·6345395	4·1646146
33	3·8456776	4·4121885	33	3·7381122	4·2862319	33	3·6233344	4·1532116
34	3·8343845	4·4006659	34	3·7268191	4·2747225	34	3·6120413	4·1417140
35	3·8230011	4·3890445	35	3·7154357	4·2631146	35	3·6006579	4·1301192
36	3·8115246	4·3773211	36	3·7039592	4·2514044	36	3·5891814	4·1184225
37	3·7999520	4·3654901	37	3·6923866	4·2395888	37	3·5776088	4·1066199
38	3·7882795	4·3535480	38	3·6807141	4·2276613	38	3·5659363	4·0947079
39	3·7765030	4·3414886	39	3·6689376	4·2156185	39	3·5541598	4·0826795
40	3·7646180	4·3293064	40	3·6570526	4·2034534	40	3·5422748	4·0705314
41	3·7526193	4·3169949	41	3·6450539	4·1911600	41	3·5302761	4·0582548
42	3·7405014	4·3045468	42	3·6329360	4·1787312	42	3·5181582	4·0458446
43	3·7282583	4·2919535	43	3·6206929	4·1661592	43	3·5059151	4·0332922
44	3·7158836	4·2792058	44	3·6083182	4·1534347	44	3·4935404	4·0205892
45	3·7033702	4·2662922	45	3·5958048	4·1405464	45	3·4810270	4·0077252
46	3·6907109	4·2531986	46	3·5831455	4·1274822	46	3·4683677	3·9946875
47	3·6778977	4·2399091	47	3·5703323	4·1142252	47	3·4555545	3·9814616
48	3·6649223	4·2264011	48	3·5573569	4·1007558	48	3·4425791	3·9680269
49	3·6517758	4·2126475	49	3·5442104	4·0870468	49	3·4294326	3·9543597
50	3·6384491	4·1986115	50	3·5308837	4·0730630	50	3·4161059	3·9404248
51	3·6249323	4·1842450	51	3·5173669	4·0587577	51	3·4025891	3·9261773
52	3·6112152	4·1694849	52	3·5036498	4·0440681	52	3·3888720	3·9115539
53	3·5972871	4·1542474	53	3·4897217	4·0289098	53	3·3749439	3·8964711
54	3·5831370	4·1384237	54	3·4755716	4·0131710	54	3·3607938	3·8808142

JOINT LIVES :—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	87			88			89	
Age of (x)	λ $D_{x,\,87}$	λ $N_{x,\,87}$	**Age** of (x)	λ $D_{x,\,88}$	λ $N_{x,\,88}$	**Age** of (x)	λ $D_{x,\,89}$	λ $N_{x,\,89}$
55	3·5680899	4·1218686	55	3·4605245	3·9967030	55	3·3457467	3·8644286
56	3·5524632	4·1046356	56	3·4448978	3·9795648	56	3·3301200	3·8473783
57	3·5362310	4·0866779	57	3·4286656	3·9617077	57	3·3138878	3·8296183
58	3·5193563	4·0679355	58	3·4117909	3·9430754	58	3·2970131	3·8110895
59	3·5017914	4·0483408	59	3·3942260	3·9235989	59	3·2794482	3·7917264
60	3·4834775	4·0278142	60	3·3759121	3·9032013	60	3·2611343	3·7714508
61	3·4643447	4·0062679	61	3·3567793	3·8817937	61	3·2420015	3·7501758
62	3·4443126	3·9836024	62	3·3367472	3·8592788	62	3·2219694	3·7278039
63	3·4232895	3·9597090	63	3·3157241	3·8355485	63	3·2009463	3·7042278
64	3·4011728	3·9344702	64	3·2936074	3·8104832	64	3·1788296	3·6793306
65	3·3778492	3·9077584	65	3·2702838	3·7839579	65	3·1555060	3·6529827
66	3·3531941	3·8794359	66	3·2456287	3·7558353	66	3·1308509	3·6250510
67	3·3270722	3·8493574	67	3·2195068	3·7259672	67	3·1047290	3·5953871
68	3·2993373	3·8173650	68	3·1917719	3·6942005	68	3·0769941	3·5638345
69	3·2698320	3·7832965	69	3·1622666	3·6603674	69	3·0474888	3·5302304
70	3·2383883	3·7469734	70	3·1308229	3·6242955	70	3·0160451	3·4943982
71	3·2048270	3·7082161	71	3·0972616	3·5857990	71	2·9824838	3·4561542
72	3·1689580	3·6668295	72	3·0613926	3·5446855	72	2·9466148	3·4153052
73	3·1305804	3·6226160	73	3·0230150	3·5007537	73	2·9082372	3·3716484
74	3·0894823	3·5753588	74	2·9819169	3·4537930	74	2·8671391	3·3249721
75	3·0454407	3·5248438	75	2·9378753	3·4035809	75	2·8230975	3·2750553
76	2·9982218	3·4708383	76	2·8906564	3·3498887	76	2·7758786	3·2216672
77	2·9475810	3·4131057	77	2·8400156	3·2924770	77	2·7252378	3·1645688
78	2·8932624	3·3513980	78	2·7856970	3·2310978	78	2·6709192	3·1035098
79	2·8349995	3·2854588	79	2·7274341	3·1654933	79	2·6126563	3·0382330
80	2·7725147	3·2150216	80	2·6649493	3·0953965	80	2·5501715	2·9684694
81	2·7055195	3·1398111	81	2·5979541	3·0205303	81	2·4831763	2·8939414
82	2·6337144	3·0595422	82	2·5261490	2·9406096	82	2·4113712	2·8143621
83	2·5567891	2·9739186	83	2·4492237	2·8553374	83	2·3344459	2·7294353
84	2·4744221	2·8826356	84	2·3668567	2·7644071	84	2·2520789	2·6388535
85	2·3862814	2·7853790	85	2·2787160	2·6675034	85	2·1639382	2·5422988
86	2·2920235	2·6818235	86	2·1844581	2·5643003	86	2·0696803	2·4394432
87	2·1912944	2·5716332	87	2·0837290	2·4544622	87	1·9689512	2·3299537
88	2·0837290	2·4544622	88	1·9761636	2·3376411	88	1·8613858	2·2134798
89	1·9689512	2·3299537	89	1·8613858	2·2134798	89	1·7466080	2·0896639
90	1·8465741	2·1977416	90	1·7390087	2·0816105	90	1·6242309	1·9581366
91	1·7161998	2·0574470	91	1·6086344	1·9416555	91	1·4938566	1·8185182
92	1·5774194	1·9086829	92	1·4698540	1·7932238	92	1·3550762	1·6704212
93	1·4298132	1·7510442	93	1·3222478	1·6359178	93	1·2074700	1·5134400
94	1·2729503	1·5841231	94	1·1653849	1·4693168	94	1·0506071	1·3471699
95	1·1063891	1·4074895	95	0·9988237	1·2930044	95	0·8840459	1·1711704
96	0·9296771	1·2207120	96	0·8221117	1·1065309	96	0·7073339	0·9850131
97	0·7423506	1·0232977	97	0·6347852	0·9094490	97	0·5200074	0·7882320
98	0·5439353	0·8147668	98	0·4363699	0·7012138	98	0·3215921	0·5803432
99	0·3339455	0·5945362	99	0·2263801	0·4812849	99	0·1116023	0·3607070
100	0·1118850	0·3617467	100	0·0043196	0·2489047	100	9·8895418	0·1286577
101	9·8772465	0·1151110	101	9·7696811	0·0026843	101	9·6549033	$\bar{1}$·8829797
102	9·6295117	$\bar{1}$·8519917	102	9·5219463	$\bar{1}$·7401257	102	9·4071685	$\bar{1}$·6209684
103	9·3681514	$\bar{1}$·5658478	103	9·2605860	$\bar{1}$·4549972	103	9·1458082	$\bar{1}$·3366598
104	9·0926256	$\bar{1}$·2387986	104	8·9850602	$\bar{1}$·1290451	104	8·8702824	$\bar{1}$·0124154
105	8·8023830		105	8·6948176		105	8·5800398	
106	8·4968618		106	8·3892964		106	8·2745186	
107	8·1754889		107	8·0679235		107	7·9531457	
108	7·8376805		108	7·7301151		108	7·6153373	
109	7·4828417		109	7·3752763		109	7·2604985	

JOINT LIVES :—Two Females.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	90			91			92	
Age of (x)	λ $D_{x,90}$	λ $N_{x,90}$	Age of (x)	λ $D_{x,91}$	λ $N_{x,91}$	Age of (x)	λ $D_{x,92}$	λ $N_{x,92}$
0	3·9395734	4·3977466	0	3·8091991	4·2509243	0	3·6704187	4·0959176
1	3·8703152	4·3595425	1	3·7399409	4·2118622	1	3·6011605	4·0559908
2	3·8361376	4·3374205	2	3·7057633	4·1893800	2	3·5669829	4·0331474
3	3·8140744	4·3211565	3	3·6837001	4·1729242	3	3·5449197	4·0165002
4	3·7970268	4·3076574	4	3·6666525	4·1593045	4	3·5278721	4·0027603
5	3·7828604	4·2958305	5	3·6524861	4·1473983	5	3·5137057	3·9907752
6	3·7706369	4·2850965	6	3·6402626	4·1366118	6	3·5014822	3·9799366
7	3·7596111	4·2750557	7	3·6292368	4·1265356	7	3·4904564	3·9698244
8	3·7492316	4·2654728	8	3·6188573	4·1169284	8	3·4800769	3·9601924
9	3·7394625	4·2562525	9	3·6090882	4·1076949	9	3·4703078	3·9509449
10	3·7301601	4·2472749	10	3·5997858	4·0987146	10	3·4610054	3·9419604
11	3·7211929	4·2384356	11	3·5908186	4·0898790	11	3·4520382	3·9331298
12	3·7124416	4·2296389	12	3·5820673	4·0810956	12	3·4432869	3·9243553
13	3·7037994	4·2208059	13	3·5734251	4·0722790	13	3·4346447	3·9155570
14	3·6951715	4·2118681	14	3·5647972	4·0633627	14	3·4260168	3·9066593
15	3·6864753	4·2027719	15	3·5561010	4·0542893	15	3·4173206	3·8976090
16	3·6776405	4·1934766	16	3·5472662	4·0450181	16	3·4084858	3·8883603
17	3·6686091	4·1839573	17	3·5382348	4·0355210	17	3·3994544	3·8788859
18	3·6593353	4·1742038	18	3·5289610	4·0257874	18	3·3901806	3·8691718
19	3·6497854	4·1642229	19	3·5194111	4·0158231	19	3·3806307	3·8592236
20	3·6399380	4·1540394	20	3·5095637	4·0056523	20	3·3707833	3·8490654
21	3·6297840	4·1436976	21	3·4994097	3·9953205	21	3·3606293	3·8387427
22	3·6195324	4·1332642	22	3·4891581	3·9848962	22	3·3503777	3·8283280
23	3·6091868	4·1227403	23	3·4788125	3·9743822	23	3·3400321	3·8178224
24	3·5987498	4·1121292	24	3·4683755	3·9637798	24	3·3295951	3·8072291
25	3·5882241	4·1014311	25	3·4578498	3·9530915	25	3·3190694	3·7965494
26	3·5776114	4·0906478	26	3·4472371	3·9423172	26	3·3084567	3·7857845
27	3·5669134	4·0797798	27	3·4365391	3·9314584	27	3·2977587	3·7749343
28	3·5561311	4·0688268	28	3·4257568	3·9205151	28	3·2869764	3·7639997
29	3·5452650	4·0577889	29	3·4148907	3·9094865	29	3·2761103	3·7529806
30	3·5343151	4·0466645	30	3·4039108	3·8983725	30	3·2651604	3·7418753
31	3·5232812	4·0354530	31	3·3929069	3·8871704	31	3·2541265	3·7306846
32	3·5121624	4·0241527	32	3·3817881	3·8758805	32	3·2430077	3·7194034
33	3·5009573	4·0127605	33	3·3705830	3·8644992	33	3·2318026	3·7080324
34	3·4896642	4·0012749	34	3·3592899	3·8530237	34	3·2205095	3·6965678
35	3·4782808	3·9896914	35	3·3479065	3·8414527	35	3·2091261	3·6850068
36	3·4668043	3·9780078	36	3·3364300	3·8297803	36	3·1976496	3·6733463
37	3·4552317	3·9662187	37	3·3248574	3·8180047	37	3·1860770	3·6615817
38	3·4435592	3·9543197	38	3·3131849	3·8061189	38	3·1744045	3·6497096
39	3·4317827	3·9423073	39	3·3014084	3·7941191	39	3·1626280	3·6377228
40	3·4198977	3·9301730	40	3·2895234	3·7820008	40	3·1507430	3·6256180
41	3·4078990	3·9179139	41	3·2775247	3·7697553	41	3·1387443	3·6133883
42	3·3957811	3·9055202	42	3·2654068	3·7573801	42	3·1266264	3·6010262
43	3·3835380	3·8929868	43	3·2531637	3·7448630	43	3·1143833	3·5885283
44	3·3711633	3·8803041	44	3·2407890	3·7321991	44	3·1020086	3·5758815
45	3·3586499	3·8674622	45	3·2282756	3·7193785	45	3·0894952	3·5630799
46	3·3459906	3·8544500	46	3·2156163	3·7063892	46	3·0768359	3·5501133
47	3·3331774	3·8412518	47	3·2028031	3·6932185	47	3·0640227	3·5369660
48	3·3202020	3·8278511	48	3·1898277	3·6798474	48	3·0510473	3·5236242
49	3·3070555	3·8142217	49	3·1766812	3·6662549	49	3·0379008	3·5100649
50	3·2937288	3·8003328	50	3·1633545	3·6524078	50	3·0245741	3·4962584
51	3·2802120	3·7861386	51	3·1498377	3·6382646	51	3·0110573	3·4821616
52	3·2664949	3·7715786	52	3·1361206	3·6237639	52	2·9973402	3·4677174
53	3·2525668	3·7565677	53	3·1221925	3·6088212	53	2·9834121	3·4528388
54	3·2384167	3·7409384	54	3·1080424	3·5933171	54	2·9692620	3·4374057

JOINT LIVES :—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	90			91			92	
Age of (x)	λ $D_{x,\,90}$	λ $N_{x,\,90}$	Age of (x)	λ $D_{x,\,91}$	λ $N_{x,\,91}$	Age of (x)	λ $D_{x,\,92}$	λ $N_{x,\,92}$
55	3·2233696	3·7246813	55	3·0929953	3·5770838	55	2·9542149	3·4212443
56	3·2077429	3·7077158	56	3·0773686	3·5601985	56	2·9385882	3·4044350
57	3·1915107	3·6900454	57	3·0611364	3·5426151	57	2·9223560	3·3869334
58	3·1746360	3·6716162	58	3·0442617	3·5242780	58	2·9054813	3·3686860
59	3·1570711	3·6523595	59	3·0266968	3·5051242	59	2·8879164	3·3496280
60	3·1387572	3·6322011	60	3·0083829	3·4850752	60	2·8696025	3·3296842
61	3·1196244	3·6110517	61	2·9892501	3·4640461	61	2·8504697	3·3087694
62	3·0995923	3·5888160	62	2·9692180	3·4419407	62	2·8304376	3·2867876
63	3·0785692	3·5653873	63	2·9481949	3·4186525	63	2·8094145	3·2636335
64	3·0564525	3·5406486	64	2·9260782	3·3940652	64	2·7872978	3·2391906
65	3·0331289	3·5144734	65	2·9027546	3·3680517	65	2·7639742	3·2133337
66	3·0084738	3·4867223	66	2·8780995	3·3404768	66	2·7393191	3·1859256
67	2·9823519	3·4572537	67	2·8519776	3·3111944	67	2·7131972	3·1568216
68	2·9546170	3·4259089	68	2·8242427	3·2800484	68	2·6854623	3·1258663
69	2·9251117	3·3925236	69	2·7947374	3·2468733	69	2·6559570	3·0928939
70	2·8936680	3·3569224	70	2·7632937	3·2114948	70	2·6245133	3·0577289
71	2·8601067	3·3189213	71	2·7297324	3·1737281	71	2·5909520	3·0201876
72	2·8242377	3·2783272	72	2·6938634	3·1333789	72	2·5550830	2·9800757
73	2·7858601	3·2349362	73	2·6554858	3·0902451	73	2·5167054	2·9371888
74	2·7447620	3·1885362	74	2·6143877	3·0441127	74	2·4756073	2·8913150
75	2·7007204	3·1389056	75	2·5703461	2·9947591	75	2·4315657	2·8422309
76	2·6535015	3·0858134	76	2·5231272	2·9419540	76	2·3843168	2·7897033
77	2·6028607	3·0290191	77	2·4724864	2·8854551	77	2·3337060	2·7334918
78	2·5485421	2·9682733	78	2·4181678	2·8250131	78	2·2793874	2·6733444
79	2·4902792	2·9033152	79	2·3599049	2·7603675	79	2·2211245	2·6090018
80	2·4277944	2·8338773	80	2·2974201	2·6912469	80	2·1586397	2·5401918
81	2·3607992	2·7596815	81	2·2304249	2·6173736	81	2·0916445	2·4666348
82	2·2889941	2·6804370	82	2·1586198	2·5384594	82	2·0198394	2·3880390
83	2·2120688	2·5958488	83	2·0816945	2·4542029	83	1·9429141	2·3041102
84	2·1297018	2·5056085	84	1·9993275	2·3642979	84	1·8605471	2·2145329
85	2·0415611	2·4093988	85	1·9111868	2·2684244	85	1·7724064	2·1189911
86	1·9473032	2·3068876	86	1·8169289	2·1662546	86	1·6781485	2·0171540
87	1·8465741	2·1977416	87	1·7161998	2·0574470	87	1·5774194	1·9086829
88	1·7390087	2·0816105	88	1·6086344	1·9416555	88	1·4698540	1·7932238
89	1·6242309	1·9581366	89	1·4938566	1·8185182	89	1·3550762	1·6704212
90	1·5018528	1·8269497	90	1·3714795	1·6876680	90	1·2326991	1·5399000
91	1·3714795	1·6876680	91	1·2411052	1·5487210	91	1·1023248	1·4012851
92	1·2326991	1·5399000	92	1·1023248	1·4012851	92	0·9635444	1·2541781
93	1·0850929	1·3832497	93	0·9547186	1·2449547	93	0·8159382	1·0981763
94	0·9282300	1·2172944	94	0·7978557	1·0793260	94	0·6590753	0·9328541
95	0·7616688	1·0416256	95	0·6312945	0·9039577	95	0·4925141	0·7578134
96	0·5849568	0·8557735	96	0·4545825	0·7184436	96	0·3158021	0·5725812
97	0·3976303	0·6593076	97	0·2672560	0·5222747	97	0·1284756	0·3767594
98	0·1992150	0·4517097	98	0·0688407	0·3150042	98	9·9300603	0·1697626
99	9·9892252	0·2324624	99	9·8588509	0·0960406	99	9·7200705	$\bar{1}$·9511432
100	9·7671647	0·0006943	100	9·6367904	$\bar{1}$·8647483	100	9·4980100	$\bar{1}$·7201593
101	9·5325262	$\bar{1}$·7554175	101	9·4021519	$\bar{1}$·6197193	101	9·2633715	$\bar{1}$·4758164
102	9·2847914	$\bar{1}$·4941546	102	9·1544171	$\bar{1}$·3590762	102	9·0156367	$\bar{1}$·2153732
103	9·0234311	$\bar{1}$·2105860	103	8·8930568	$\bar{1}$·0766404	103	8·7542764	$\bar{2}$·9339932
104	8·7479053	$\bar{2}$·8876173	104	8·6175310	$\bar{2}$· 551123	104	8·4787506	$\bar{2}$·6138418
105	8·4576627		105	8·3272884		105	8·1885080	
106	8·1521415		106	8·0217672		106	7·8829868	
107	7·8307686		107	7·7003943		107	7·5616139	
108	7·4929602		108	7·3625859		108	7·2238055	
109	7·1381214		109	7·0077471		109	6·8689667	

JOINT LIVES :—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	93			94			95	
Age of (x)	$\lambda\ D_{x,\,93}$	$\lambda\ N_{x,\,93}$	**Age** of (x)	$\lambda\ D_{x,\,94}$	$\lambda\ N_{x,\,94}$	**Age** of (x)	$\lambda\ D_{x,\,95}$	$\lambda\ N_{x,\,95}$
0	3·5228125	3·9323134	0	3·3659496	3·7596800	0	3·1993884	3·5775584
1	3·4535543	3·8915158	1	3·2966914	3·7180049	1	3·1301302	3·5350015
2	3·4193767	3·8683099	2	3·2625138	3·6944359	2	3·0959526	3·5110675
3	3·3973135	3·8514724	3	3·2404506	3·6774071	3	3·0738894	3·4938497
4	3·3802659	3·8376118	4	3·2234030	3·6634276	4	3·0568418	3·4797494
5	3·3660995	3·8255481	5	3·2092366	3·6512848	5	3·0426754	3·4675282
6	3·3538760	3·8146577	6	3·1970131	3·6403433	6	3·0304519	3·4565345
7	3·3428502	3·8045102	7	3·1859873	3·6301603	7	3·0194261	3·4463166
8	3·3324707	3·7948525	8	3·1756078	3·6204765	8	3·0090466	3·4366078
9	3·3227016	3·7855904	9	3·1658387	3·6111995	9	2·9992775	3·4273146
10	3·3133992	3·7766010	10	3·1565363	3·6022044	10	2·9899751	3·4183129
11	3·3044320	3·7677731	11	3·1475691	3·5933791	11	2·9810079	3·4094891
12	3·2956807	3·7590102	12	3·1388178	3·5846241	12	2·9722566	3·4007429
13	3·2870385	3·7502244	13	3·1301756	3·5758550	13	2·9636144	3·3919865
14	3·2784106	3·7413486	14	3·1215477	3·5669946	14	2·9549865	3·3831451
15	3·2697144	3·7323182	15	3·1128515	3·5579881	15	2·9462903	3·3741568
16	3·2608796	3·7230927	16	3·1040167	3·5487824	16	2·9374555	3·3649738
17	3·2518482	3·7136392	17	3·0949853	3·5393509	17	2·9284241	3·3555626
18	3·2425744	3·7039454	18	3·0857115	4·5296754	18	2·9191503	3·3459060
19	3·2330245	3·6940126	19	3·0761616	3·5197598	19	2·9096004	3·3360052
20	3·2231771	3·6838662	20	3·0663142	3·5096245	20	2·8997530	3·3258824
21	3·2130231	3·6735536	21	3·0561602	3·4993199	21	2·8895990	3·3155866
22	3·2027715	3·6631466	22	3·0459086	3·4889228	22	2·8793474	3·3051969
23	3·1924259	3·6526505	23	3·0355630	3·4784337	23	2·8690018	3·2947171
24	3·1819889	3·6420656	24	3·0251260	3·4678581	24	2·8585648	3·2841491
25	3·1714632	3·6313940	25	3·0146003	3·4571944	25	2·8480391	3·2734936
26	3·1608505	3·6206378	26	3·0039876	3·4464456	26	2·8374264	3·2627529
27	3·1501525	3·6097960	27	2·9932896	3·4356129	27	2·8267284	3·2519279
28	3·1393702	3·5988704	28	2·9825073	3·4246955	28	2·8159461	3·2410179
29	3·1285041	3·5878590	29	2·9716412	3·4136935	29	2·8050800	3·2300242
30	3·1175542	3·5767640	30	2·9606913	3·4026057	30	2·7941301	3·2189452
31	3·1065203	3·5655810	31	2·9496574	3·3914318	31	2·7830962	3·2077795
32	3·0954015	3·5543110	32	2·9385386	3·3801698	32	2·7719774	3·1965263
33	3·0841964	3·5429486	33	2·9273335	3·3688178	33	2·7607723	3·1851831
34	3·0729033	3·5314943	34	2·9160404	3·3573732	34	2·7494792	3·1737478
35	3·0615199	3·5199448	35	2·9046570	3·3458331	35	2·7380958	3·1622172
36	3·0500434	3·5082940	36	2·8931805	3·3341937	36	2·7266193	3·1505882
37	3·0384708	3·4965408	37	2·8816079	3·3224514	37	2·7150467	3·1388564
38	3·0267983	3·4846798	38	2·8699354	3·3106018	38	2·7033742	3·1270180
39	3·0150218	3·4727068	39	2·8581589	3·2986401	39	2·6915977	3·1150674
40	3·0031368	3·4606152	40	2·8462739	3·2865608	40	2·6797127	3·1030004
41	2·9911381	3·4483985	41	2·8342752	3·2743581	41	2·6677140	3·0908106
42	2·9790202	3·4360524	42	2·8221573	3·2620256	42	2·6555961	3·0784917
43	2·9667771	3·4235686	43	2·8099142	3·2495571	43	2·6433530	3·0660370
44	2·9544024	3·4109400	44	2·7975395	3·2369441	44	2·6309783	3·0534396
45	2·9418890	3·3981571	45	2·7850261	3·2241792	45	2·6184649	3·0406905
46	2·9292297	3·3852100	46	2·7723668	3·2112514	46	2·6058056	3·0277816
47	2·9164165	3·3720866	47	2·7595536	3·1981494	47	2·5929924	3·0147003
48	2·9034411	3·3587707	48	2·7465782	3·1848589	48	2·5800170	3·0014330
49	2·8902946	3·3452424	49	2·7334317	3·1713593	49	2·5668705	2·9879620
50	2·8769679	3·3314730	50	2·7201050	3·1576248	50	2·5535438	2·9742597
51	2·8634511	3·3174219	51	2·7065882	3·1436161	51	2·5400270	2·9602909
52	2·8497340	3·3030306	52	2·6928711	3·1292754	52	2·5263099	2·9459990
53	2·8358059	3·2882146	53	2·6789430	3·1145183	53	2·5123818	2·9312987
54	2·8216558	3·2728486	54	2·6647929	3·0992188	54	2·4982317	2·9160616

JOINT LIVES:—Two Females.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	93			94			95	
Age of (x)	λ $D_{x,93}$	λ $N_{x,93}$	Age of (x)	λ $D_{x,94}$	λ $N_{x,94}$	Age of (x)	λ $D_{x,95}$	λ $N_{x,95}$
55	2·8066087	3·2567550	55	2·6497458	3·0831886	55	2·4831846	2·9000950
56	2·7909820	3·2400178	56	2·6341191	3·0665208	56	2·4675579	2·8834922
57	2·7747498	3·2225947	57	2·6178869	3·0491719	57	2·4513257	2·8662152
58	2·7578751	3·2044317	58	2·6010122	3·0310904	58	2·4344510	2·8482107
59	2·7403102	3·1854657	59	2·5834473	3·0122119	59	2·4168861	2·8294177
60	2·7219963	3·1656218	60	2·5651334	2·9924633	60	2·3985722	2·8097610
61	2·7028635	3·1448158	61	2·5460006	2·9717614	61	2·3794394	2·7891582
62	2·6828314	3·1229524	62	2·5259685	2·9500108	62	2·3594073	2·7675165
63	2·6618083	3·0999261	63	2·5049454	2·9271075	63	2·3383842	2·7447310
64	2·6396916	3·0756217	64	2·4828287	2·9029358	64	2·3162675	2·7206876
65	2·6163680	3·0499134	65	2·4595051	2·8773707	65	2·2929439	2·6952601
66	2·5917129	3·0226663	66	2·4348500	2·8502767	66	2·2682888	2·6683151
67	2·5655910	2·9937333	67	2·4087281	2·8215096	67	2·2421669	2·6397066
68	2·5378561	2·9629604	68	2·3809932	2·7909126	68	2·2144320	2·6092806
69	2·5083508	2·9301827	69	2·3514879	2·7583213	69	2·1849267	2·5768698
70	2·4769071	2·8952242	70	2·3200442	2·7235616	70	2·1534830	2·5423025
71	2·4433458	2·8578997	71	2·2864829	2·6864477	71	2·1199217	2·5053915
72	2·4074768	2·8180159	72	2·2506139	2·6467839	72	2·0840527	2·4659432
73	2·3690992	2·7753686	73	2·2122363	2·6043676	73	2·0456751	2·4237520
74	2·3280011	2·7297438	74	2·1711382	2·5589856	74	2·0045770	2·3786032
75	2·2839595	2·6809199	75	2·1270966	2·5104123	75	1·9605354	2·3302760
76	2·2367406	2·6286627	76	2·0798777	2·4584172	76	1·9133165	2·2785348
77	2·1860998	2·5727299	77	2·0292369	2·4027547	77	1·8626757	2·2231358
78	2·1317812	2·5128698	78	1·9749183	2·3431736	78	1·8083571	2·1638269
79	2·0735183	2·4488207	79	1·9166554	2·2794119	79	1·7500942	2·1003444
80	2·0110335	2·3803126	80	1·8541706	2·2111970	80	1·6876094	2·0324169
81	1·9440383	2·3070635	81	1·7871754	2·1382483	81	1·6206142	1·9597609
82	1·8722332	2·2287822	82	1·7153703	2·0602743	82	1·5488091	1·8820860
83	1·7953079	2·1451693	83	1·6384150	1·9769714	83	1·4718838	1·7990895
84	1·7129409	2·0559163	84	1·5560780	1·8880312	84	1·3895168	1·7104559
85	1·6248002	1·9606976	85	1·4679373	1·7931350	85	1·3013761	1·6158680
86	1·5305423	1·8591881	86	1·3736794	1·6919430	86	1·2071182	1·5149978
87	1·4298132	1·7510442	87	1·2729503	1·5841231	87	1·1063891	1·4074895
88	1·3222478	1·6359178	88	1·1653849	1·4693168	88	0·9988237	1·2930044
89	1·2074700	1·5134400	89	1·0506071	1·3471699	89	0·8840459	1·1711704
90	1·0850929	1·3832497	90	0·9282300	1·2172944	90	0·7616688	1·0416256
91	0·9547186	1·2449547	91	0·7978557	1·0793260	91	0·6312945	0·9039577
92	0·8159382	1·0981763	92	0·6590753	0·9328541	92	0·4925141	0·7578134
93	0·6683320	0·9424991	93	0·5114691	0·7775066	93	0·3449079	0·6027435
94	0·5114691	0·7775066	94	0·3546062	0·6128368	94	0·1880450	0·4384158
95	0·3449079	0·6027435	95	0·1880450	0·4384158	95	0·0214838	0·2643219
96	0·1681959	0·4178535	96	0·0113330	0·2537498	96	9·8447718	0·0800128
97	9·9808694	0·2222741	97	9·8240065	0·0585399	97	9·6574453	$\bar{1}$·8849652
98	9·7824541	0·0156950	98	9·6255912	$\bar{1}$·8521139	98	9·4590300	$\bar{1}$·6789734
99	9·5724643	$\bar{1}$·7972675	99	9·4156014	$\bar{1}$·6342757	99	9·2490402	$\bar{1}$·4610481
100	9·3504038	$\bar{1}$·5666731	100	9·1935409	$\bar{1}$·4038066	100	9·0269797	$\bar{1}$·2314696
101	9·1157653	$\bar{1}$·3226327	101	8·9589024	$\bar{1}$·1601683	101	8·7923412	$\bar{2}$·9881128
102	8·8680305	$\bar{1}$·0633334	102	8·7111676	$\bar{2}$·9014583	102	8·5446064	$\bar{2}$·7291648
103	8·6066702	$\bar{2}$·7817554	103	8·4498073	$\bar{2}$·6222140	103	8·2832461	$\bar{2}$·4517864
104	8·3311144	$\bar{2}$·4638930	104	8·1742815	$\bar{2}$·3031961	104	8·0077203	$\bar{2}$·1367206
105	8·0409018		105	7·8840389		105	7·7174777	
106	7·7353806		106	7·5785177		106	7·4119565	
107	7·4140077		107	7·2571448		107	7·0905836	
108	7·0761993		108	6·9193364		108	6·7527752	
109	6·7213505		109	6·5614976		109	6·3979364	

JOINT LIVES:—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	96			97			98	
Age of (x)	λ $D_{x,\,96}$	λ $N_{x,\,96}$	**Age** of (x)	λ $D_{x,\,97}$	λ $N_{x,\,97}$	**Age** of (x)	λ $D_{x,\,98}$	λ $N_{x,\,98}$
0	3·0226764	3·3854633	0	2·8353499	3·1828550	0	2·6369346	2·9691036
1	2·9534182	3·3420123	1	2·7660917	3·1384935	1	2·5676764	2·9238039
2	2 9192406	3·3177118	2	2·7319141	3·1138194	2	2·5334988	2·8987449
3	2·8971774	3·3003018	3	2·7098509	3·0962167	3	2·5114356	2·8809422
4	2·8801298	3·2860831	4	2·6928033	3·0818752	4	2·4943880	2·8664770
5	2·8659634	3·2737828	5	2·6786369	3·0694957	5	2·4802216	2·8540126
6	2·8537399	3·2627372	6	2·6664134	3·0583976	6	2·4679981	2·8428613
7	2·8427141	3·2524828	7	2·6553876	3·0481068	7	2·4569723	2·8325326
8	2·8323346	3·2427479	8	2·6450081	3·0383447	8	2·4465928	2·8227426
9	2·8225655	3·2334393	9	2·6352390	3·0290199	9	2·4368237	2·8133995
10	2·8132631	3·2244308	10	2·6259366	3·0200039	10	2·4275213	2·8043760
11	2·8042959	3·2156082	11	2·6169694	3·0111816	11	2·4185541	2·7955540
12	2·7955446	3·2068698	12	2·6082181	3·0024508	12	2·4098028	2·7868302
13	2·7869024	3·1981266	13	2·5995759	2·9937209	13	2·4011606	2·7781129
14	2·7782745	3·1893019	14	2·5909480	2·9849133	14	2·3925327	2·7693234
15	2·7695783	3·1803337	15	2·5822518	2·9759641	15	2·3838365	2·7603946
16	2·7607435	3·1711716	16	2·5734170	2·9668234	16	2·3750017	2·7512737
17	2·7517121	3·1617808	17	2·5643856	2·9574530	17	2·3659703	2·7419257
18	2·7424383	4·1521430	18	2·5551118	2·9478335	18	2·3566965	2·7323254
19	2·7328884	3·1422574	19	2·5455619	2·9379640	19	2·3471466	2·7224710
20	2·7230410	3·1321466	20	2·5357145	2·9278644	20	2·3372992	2·7123837
21	2·7128870	3·1218588	21	2·5255605	2·9175853	21	2·3271452	2·7021125
22	2·7026354	3·1114779	22	2·5153089	2·9072119	22	2·3168936	2·6917479
23	2·6922898	3·1010053	23	2·5049633	2·8967483	23	2·3065480	2·6812910
24	2·6818528	3·0904450	24	2·4945263	2·8861945	24	2·2961110	2·6707467
25	2·6713271	3·0797983	25	2·4840006	2·8755555	25	2·2855853	2·6601138
26	2·6607144	3·0690651	26	2·4733879	2·8648307	26	2·2749726	2·6493972
27	2·6500164	3·0582472	27	2·4626899	2·8540205	27	2·2642746	2·6385961
28	2·6392341	3·0473458	28	2·4519076	2·8431262	28	2·2534923	2·6277089
29	2·6283680	3·0363590	29	2·4410415	2·8321479	29	2·2426262	2·6167380
30	2·6174181	3·0252883	30	2·4300916	2·8210843	30	2·2316763	2·6056832
31	2·6063842	3·0141315	31	2·4190577	2·8099359	31	2·2206424	2·5945417
32	2·5952654	3·0028863	32	2·4079389	2·7986997	32	2·2095236	2·5833145
33	2·5840603	2·9915521	33	2·3967338	2·7873733	33	2·1983185	2·5719975
34	2·5727672	2·9801257	34	2·3854407	2·7759562	34	2·1870254	2·5605880
35	2·5613838	2·9686048	35	2·3740573	2·7644444	35	2·1756420	2·5490867
36	2·5499073	2·9569849	36	2·3625808	2·7528348	36	2·1641655	2·5374867
37	2·5383347	2·9452637	37	2·3510082	2·7411225	37	2·1525929	2·5257857
38	2·5266622	2·9334357	38	2·3393357	2·7293057	38	2·1409204	2·5139776
39	2·5148857	2·9214971	39	2·3275592	2·7173775	39	2·1291439	2·5020609
40	2·5030007	2·9094410	40	2·3156742	2·7053342	40	2·1172589	2·4900287
41	2·4910020	2·8972636	41	2·3036755	2·6931683	41	2·1052602	2·4778763
42	2·4788841	2·8849578	42	2·2915576	2·6808756	42	2·0931423	2·4655955
43	2·4666410	2·8725169	43	2·2793145	2·6684483	43	2·0808992	2·4531822
44	2·4542663	2·8599341	44	2·2669398	2·6558795	44	2·0685245	2·4406274
45	2·4417529	2·8472018	45	2·2544264	2·6431614	45	2·0560111	2·4279257
46	2·4290936	2·8343094	46	2·2417671	2·6302875	46	2·0433518	2·4150653
47	2·4162804	2·8212482	47	2·2289539	2·6172447	47	2·0305386	2·4020429
48	2·4033050	2·8080035	48	2·2159785	2·6040218	48	2·0175632	2·3888416
49	2·3901585	2·7945585	49	2·2028320	2·5906023	49	2·0044167	2·3754478
50	2·3768318	2·7808888	50	2·1895053	2·5769630	50	1·9910900	2·3618394
51	2·3633150	2·7669576	51	2·1759885	2·5630704	51	1·9775732	2·3479834
52	2·3495979	2·7527121	52	2·1622714	2·5488695	52	1·9638561	2·3338288
53	2·3356698	2·7380675	53	2·1483433	2·5342787	53	1·9499280	2·3192922
54	2·3215197	2·7228921	54	2·1341932	2·5191649	54	1·9357779	2·3042386

JOINT LIVES:—Two Females.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age of (y)	96			97			98	
Age of (x)	λ $D_{x,\,96}$	λ $N_{x,\,96}$	**Age** of (x)	λ $D_{x,\,97}$	λ $N_{x,\,97}$	**Age** of (x)	λ $D_{x,\,98}$	λ $N_{x,\,98}$
55	2·3064726	2·7069839	55	2·1191461	2·5033166	55	1·9207308	2·2884498
56	2·2908459	2·6904477	56	2·1035194	2·4868412	56	1·9051041	2·2720390
57	2·2746137	2·6732384	57	2·0872872	2·4697027	57	1·8888719	2·2549667
58	2·2577390	2·6553094	58	2·0704125	2·4518463	58	1·8719972	2·2371857
59	2·2401741	2·6365972	59	2·0528476	2·4332144	59	1·8544323	2·2186344
60	2·2218602	2·6170308	60	2·0345337	2·4137338	60	1·8361184	2·1992425
61	2·2027274	2·5965256	61	2·0154009	2·3933260	61	1·8169856	2·1789283
62	2·1826953	2·5749880	62	1·9953688	2·3718924	62	1·7969535	2·1576006
63	2·1616722	2·5523177	63	1·9743457	2·3493345	63	1·7759304	2·1351560
64	2·1395555	2·5283973	64	1·9522290	2·3255364	64	1·7538137	2·1114820
65	2·1162319	2·5031053	65	1·9289054	2·3003761	65	1·7304901	2·0864538
66	2·0915768	2·4763040	66	1·9042503	2·2737180	66	1·7058350	2·0599404
67	2·0654549	2·4478523	67	1·8781284	2·2454182	67	1·6797131	2·0317949
68	2·0377200	2·4175912	68	1·8503935	2·2153216	68	1·6519782	2·0018639
69	2·0082147	2·3853578	69	1·8208882	2·1832633	69	1·6224729	1·9699831
70	1·9767710	2·3509768	70	1·7894445	2·1490691	70	1·5910292	1·9359761
71	1·9432097	2·3142645	71	1·7558832	2·1125527	71	1·5574679	1·8996597
72	1·9073407	2·2750254	72	1·7200142	2·0735208	72	1·5215989	1·8608367
73	1·8689631	2·2330538	73	1·6816366	2·0317679	73	1·4832213	1·8193044
74	1·8278650	2·1881365	74	1·6405385	1·9870784	74	1·4421232	1·7748475
75	1·7838234	2·1400493	75	1·5964969	1·9392286	75	1·3980816	1·7272386
76	1·7366045	2·0885560	76	1·5492780	1·8879845	76	1·3508627	1·6762445
77	1·6859637	2·0334161	77	1·4986372	1·8330987	77	1·3002219	1·6216218
78	1·6316451	1·9743735	78	1·4443186	1·7743220	78	1·2459033	1·5631095
79	1·5733822	1·9111667	79	1·3860557	1·7113871	79	1·1876404	1·5004533
80	1·5108974	1·8435193	80	1·3235709	1·6440218	80	1·1251556	1·4333697
81	1·4439022	1·7711530	81	1·2565757	1·5719381	81	1·0581604	1·3615806
82	1·3720971	1·6937709	82	1·1847706	1·4948500	82	0·9863553	1·2847826
83	1·2951718	1·6110730	83	1·1078453	1·4124471	83	0·9094300	1·2026844
84	1·2128048	1·5227467	84	1·0254783	1·3244224	84	0·8270630	1·1149611
85	1·1246641	1·4284620	85	0·9373376	1·2304489	85	0·7389223	1·0212968
86	1·0304062	1·3278961	86	0·8430797	1·1301826	86	0·6446644	0·9213535
87	0·9296771	1·2207120	87	0·7423506	1·0232977	87	0·5430353	0·8147668
88	0·8221117	1·1065309	88	0·6347852	0·9094490	88	0·4363999	0·7012138
89	0·7073339	0·9850131	89	0·5200074	0·7882320	89	0·3215921	0·5803432
90	0·5849568	0·8557735	90	0·3976303	0·6593076	90	0·1992150	0·4517097
91	0·4545825	0·7184436	91	0·2672560	0·5222747	91	0·0688407	0·3150042
92	0·3158021	0·5725812	92	0·1284756	0·3767594	92	9·9300603	0·1697626
93	0·1681959	0·4178535	93	9·9808694	0·2222741	93	9·7824541	0·0156950
94	0·0113330	0·2537498	94	9·8240065	0·0585399	94	9·6255912	$\bar{1}$·8521139
95	9·8447718	0·0800128	95	9·6574453	$\bar{1}$·8849652	95	9·4590300	$\bar{1}$·6789734
96	9·6680598	$\bar{1}$·8960851	96	9·4807333	$\bar{1}$·7013953	96	9·2823180	$\bar{1}$·4954056
97	9·4807333	$\bar{1}$·7013953	97	9·2934068	$\bar{1}$·5071810	97	9·0949915	$\bar{1}$·3016809
98	9·2823180	$\bar{1}$·4954056	98	9·0949915	$\bar{1}$·3016809	98	8·8965762	$\bar{1}$·0969100
99	9·0723282	$\bar{1}$·2780673	99	8·8850017	$\bar{1}$·0838608	99	8·6865864	$\bar{2}$·8802418
100	8·8502677	$\bar{1}$·0480532	100	8·6629412	$\bar{2}$·8549130	100	8·4645259	$\bar{2}$·6493349
101	8·6156292	$\bar{2}$·8061800	101	8·4283027	$\bar{2}$·6117233	101	8·2298874	$\bar{2}$·4082400
102	8·3678944	$\bar{2}$·5477747	102	8·1805679	$\bar{2}$·3560259	102	7·9821526	$\bar{2}$·1492191
103	8·1065341	$\bar{2}$·2695129	103	7·9192076	$\bar{2}$·0791812	103	7·7207923	$\bar{3}$·8750613
104	7·8310083	$\bar{3}$·9590414	104	7·6436818	$\bar{3}$·7634280	104	7·4452665	$\bar{3}$·5682017
105	7·5407657		105	7·3534392		105	7·1550239	
106	7·2352445		106	7·0479180		106	6·8495027	
107	6·9138716		107	6·7265451		107	6·5281298	
108	6·5760632		108	6·3887367		108	6·1903214	
109	6·2212244		109	6·0338979		109	5·8354826	

JOINT LIVES:—TWO FEMALES.

Logarithms of the Series $D_{x,\ y}$ and $N_{x,\ y}$.

Age of (y)	99			100			101	
Age of (x)	$\lambda\ D_{x,\ 99}$	$\lambda\ N_{x,\ 99}$	Age of (x)	$\lambda\ D_{x,\ 100}$	$\lambda\ N_{x,\ 100}$	Age of (x)	$\lambda\ D_{x,\ 101}$	$\lambda\ N_{x,\ 101}$
0	2·4269448	2·7434227	0	2·2048843	2·5047087	0	1·9702458	2·2511908
1	2·3576866	2·6971282	1	2·1356261	2·4573095	1	1·9009876	2·2024696
2	2·3235090	2·6716615	2	2·1014485	2·4313862	2	1·8668100	2·1759960
3	2·3014458	2·6536476	3	2·0793853	2·4131371	3	1·8447468	2·1574610
4	2·2843982	2·6390480	4	2·0623377	2·3983897	4	1·8276992	2·1425353
5	2·2702318	2·6264974	5	2·0481713	2·3857385	5	1·8135328	2·1297666
6	2·2580083	2·6152850	6	2·0359478	2·3744643	6	1·8013093	2·1184102
7	2·2469825	2·6049169	7	2·0249220	2·3640461	7	1·7902835	2·1079386
8	2·2366030	2·5950959	8	2·0145425	2·3541911	8	1·7799040	2·0980387
9	2·2268339	2·5857348	9	2·0047734	2·3448068	9	1·7701349	2·0886257
10	2·2175315	2·5767006	10	1·9954710	2·3357625	10	1·7608325	2·0795651
11	2·2085643	2·5678788	11	1·9865038	2·3269381	11	1·7518653	2·0707370
12	2·1998130	2·5591618	12	1·9777525	2·3182282	12	1·7431140	2·0620326
13	2·1911708	2·5504583	13	1·9691103	2·3095386	13	1·7344718	2·0533578
14	2·1825429	2·5416865	14	1·9604824	2·3007871	14	1·7258439	2·0446283
15	2·1738467	2·5327799	15	1·9517862	2·2919045	15	1·7171477	2·0357730
16	2·1650119	2·5236827	16	1·9429514	2·2828325	16	1·7083129	2·0267334
17	2·1559805	2·5143552	17	1·9339200	2·2735303	17	1·6992815	2·0174615
18	2·1467067	2·5047766	18	1·9246462	2·2639732	18	1·6900077	2·0079312
19	2·1371568	2·4949390	19	1·9150963	2·2541551	19	1·6804578	1·9981351
20	2·1273094	2·4848633	20	1·9052489	2·2440940	20	1·6706104	1·9880905
21	2·1171554	2·4746008	21	1·8950949	2·2338410	21	1·6604564	1·9778484
22	2·1069038	2·4642450	22	1·8848433	2·2234938	22	1·6502048	1·9675119
23	2·0965582	2·4537967	23	1·8744977	2·2130554	23	1·6398592	1·9570837
24	2·0861212	2·4432599	24	1·8640607	2·2025276	24	1·6294222	1·9465667
25	2·0755955	2·4326358	25	1·8535350	2·1919130	25	1·6188965	1·9359620
26	2·0649828	2·4219262	26	1·8429223	2·1812122	26	1·6082838	1·9252718
27	2·0542848	2·4111330	27	1·8322243	2·1704269	27	1·5975858	1·9144965
28	2·0435025	2·4002564	28	1·8214420	2·1595576	28	1·5868035	1·9036374
29	2·0326364	2·3892920	29	1·8105759	2·1486046	29	1·5759374	1·8926939
30	2·0216865	2·3782452	30	1·7996260	2·1375664	30	1·5649875	1·8816671
31	2·0106526	2·3671135	31	1·7885921	2·1264428	31	1·5539536	1·8705543
32	1·9995338	2·3558940	32	1·7774733	2·1152333	32	1·5428348	1·8593545
33	1·9883287	2·3445860	33	1·7662682	2·1039351	33	1·5316297	1·8480678
34	1·9770356	2·3331870	34	1·7549751	2·0925459	34	1·5203366	1·8366898
35	1·9656522	2·3216941	35	1·7435917	2·0810638	35	1·5089532	1·8252196
36	1·9541757	2·3101042	36	1·7321152	2·0694846	36	1·4974767	1·8136531
37	1·9426031	2·2984133	37	1·7205426	2·0578053	37	1·4859041	1·8019865
38	1·9309306	2·2866177	38	1·7088701	2·0460213	38	1·4742316	1·7902169
39	1·9191541	2·2747119	39	1·6970936	2·0341285	39	1·4624551	1·7783372
40	1·9072691	2·2626917	40	1·6852086	2·0221211	40	1·4505701	1·7663459
41	1·8952704	2·2505518	41	1·6732099	2·0099941	41	1·4385714	1·7542336
42	1·8831525	2·2382846	42	1·6610920	1·9977423	42	1·4264535	1·7419973
43	1·8709094	2·2258846	43	1·6488489	1·9853573	43	1·4142104	1·7296313
44	1·8585347	2·2133454	44	1·6364742	1·9728335	44	1·4018357	1·7171252
45	1·8460213	2·2006585	45	1·6239608	1·9601639	45	1·3893223	1·7044740
46	1·8333620	2·1878156	46	1·6113015	1·9473396	46	1·3766630	1·6916702
47	1·8205488	2·1748100	47	1·5984883	1·9343515	47	1·3638498	1·6787050
48	1·8075734	2·1616312	48	1·5855129	1·9211931	48	1·3508744	1·6655669
49	1·7944269	2·1482635	49	1·5723664	1·9078530	49	1·3377279	1·6522521
50	1·7811002	2·1346867	50	1·5590397	1·8943100	50	1·3244012	1·6387458
51	1·7675834	2·1208692	51	1·5455229	1·8805341	51	1·3108844	1·6250170
52	1·7538663	2·1067616	52	1·5318058	1·8664776	52	1·2971673	1·6110187
53	1·7399382	2·0922816	53	1·5178777	1·8520583	53	1·2832392	1·5966697
54	1·7257881	2·0772920	54	1·5037276	1·8371375	54	1·2690891	1·5818268

JOINT LIVES:—TWO FEMALES.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	99		100			101		
Age of (x)	λ $D_{x,99}$	λ $N_{x,99}$	**Age** of (x)	λ $D_{x,100}$	λ $N_{x,100}$	**Age** of (x)	λ $D_{x,101}$	λ $N_{x,101}$
55	1·7107410	2·0615633	55	1·4886805	1·8214755	55	1·2540420	1·5662395
56	1·6951143	2·0452181	56	1·4730538	1·8051997	56	1·2384153	1·5500448
57	1·6788821	2·0282177	57	1·4568216	1·7882752	57	1·2221831	1·5332050
58	1·6620074	2·0105120	58	1·4399169	1·7706539	58	1·2053084	1·5156765
59	1·6444425	1·9920447	59	1·4223820	1·7522744	59	1·1877435	1·4974024
60	1·6261286	1·9727437	60	1·4040681	1·7330728	60	1·1694296	1·4783081
61	1·6069958	1·9525290	61	1·3849353	1·7129652	61	1·1502968	1·4583235
62	1·5869637	1·9313094	62	1·3649032	1·6918627	62	1·1302647	1·4373541
63	1·5659406	1·9089829	63	1·3438801	1·6696636	63	1·1092416	1·4153006
64	1·5438239	1·8854364	64	1·3217634	1·6462566	64	1·0871249	1·3920512
65	1·5205003	1·8605488	65	1·2984398	1·6215190	65	1·0638013	1·3674864
66	1·4958452	1·8341828	66	1·2737847	1·5953187	66	1·0391462	1·3414721
67	1·4697233	1·8062003	67	1·2476628	1·5675074	67	1·0130243	1·3138672
68	1·4419884	1·7764419	68	1·2199279	1·5379412	68	0·9852894	1·2845120
69	1·4124831	1·7447450	69	1·1904226	1·5064455	69	0·9557841	1·2532556
70	1·3810394	1·7109361	70	1·1589789	1·4728515	70	0·9243104	1·2199092
71	1·3474781	1·6748272	71	1·1254176	1·4369732	71	0·8907791	1·1842939
72	1·3116091	1·6362260	72	1·0895486	1·3986118	72	0·8549101	1·1462211
73	1·2732315	1·5949238	73	1·0511710	1·3575671	73	0·8165325	1·1054693
74	1·2321334	1·5507089	74	1·0100729	1·3136184	74	0·7754344	1·0618368
75	1·1880918	1·5033548	75	0·9660313	1·2665421	75	0·7313928	1·0150914
76	1·1408729	1·4526235	76	0·9188124	1·2161052	76	0·6841739	0·9649946
77	1·0902321	1·3982734	77	0·8681716	1·1620563	77	0·6335331	0·9113068
78	1·0359135	1·3400493	78	0·8138530	1·1041422	78	0·5792145	0·8537590
79	0·9776506	1·2776757	79	0·7555901	1·0421028	79	0·5209516	0·7920974
80	0·9151658	1·2108961	80	0·6931053	0·9756386	80	0·4584668	0·7260504
81	0·8481706	1·1394068	81	0·6261101	0·9044992	81	0·3914716	0·6552921
82	0·7763655	1·0629278	82	0·5543050	0·8283569	82	0·3196665	0·5795778
83	0·6994402	0·9811342	83	0·4773797	0·7469299	83	0·2427412	0·4985587
84	0·6170732	0·8937396	84	0·3950127	0·6598687	84	0·1603742	0·4119562
85	0·5289325	0·8003871	85	0·3068720	0·5668969	85	0·0722335	0·3193768
86	0·4346746	0·7007729	86	0·2126141	0·4676229	86	9·9779756	0·2205788
87	0·3339455	0·5945362	87	0·1118850	0·3617467	87	9·8772465	0·1151110
88	0·2263801	0·4812849	88	0·0043196	0·2489047	88	9·7696811	0·0026843
89	0·1116023	0·3607070	89	9·8895418	0·1286577	89	9·6549033	$\bar{1}$·8829797
90	9·9892252	0·2324624	90	9·7671647	0·0006943	90	9·5325262	$\bar{1}$·7554175
91	9·8588509	0·0960406	91	9·6367904	$\bar{1}$·8647483	91	9·4021519	$\bar{1}$·6197193
92	9·7200705	$\bar{1}$·9511432	92	9·4980100	$\bar{1}$·7201593	92	9·2633715	$\bar{1}$·4758164
93	9·5724643	$\bar{1}$·7972675	93	9·3504038	$\bar{1}$·5666731	93	9·1157653	$\bar{1}$·3226327
94	9·4156014	$\bar{1}$·6342757	94	9·1935409	$\bar{1}$·4038066	94	8·9589024	$\bar{1}$·1601683
95	9·2490402	$\bar{1}$·4610481	95	9·0269797	$\bar{1}$·2314696	95	8·7923412	$\bar{2}$·9881128
96	9·0723282	$\bar{1}$·2780673	96	8·8502677	$\bar{1}$·0480532	96	8·6156292	$\bar{2}$·8061800
97	8·8850017	$\bar{1}$·0838608	97	8·6629412	$\bar{2}$·8549130	97	8·4283027	$\bar{2}$·6117233
98	8·6865864	$\bar{2}$·8802418	98	8·4645259	$\bar{2}$·6493349	98	8·2298874	$\bar{2}$·4082400
99	8·4765966	$\bar{2}$·6646420	99	8·2545361	$\bar{2}$·4361626	99	8·0198976	$\bar{2}$·1903317
100	8·2545361	$\bar{2}$·4361626	100	8·0324756	$\bar{2}$·2095150	100	7·7978371	$\bar{3}$·9684829
101	8·0198976	$\bar{2}$·1903317	101	7·7978371	$\bar{3}$·9684829	101	7·5631986	$\bar{3}$·7323938
102	7·7721628	$\bar{3}$·9344985	102	7·5501023	$\bar{3}$·6989700	102	7·3154638	$\bar{3}$·4771213
103	7·5108025	$\bar{3}$·6532125	103	7·2887420	$\bar{3}$·4313638	103	7·0541035	$\bar{3}$·1760913
104	7·2352767	$\bar{3}$·3424227	104	7·0132162	$\bar{3}$·1139434	104	6·7785777	$\bar{4}$·9030900
105	6·9450341		105	6·7229736		105	6·4883351	
106	6·6395129		106	6·4174524		106	6·1828139	
107	6·3181400		107	6·0960795		107	5·8614410	
108	5·9803316		108	5·7582711		108	5·5236326	
109	5·6254928		109	5·4034323		109	5·1687938	

JOINT LIVES:—TWO FEMALES.

Logarithms of the Series $D_{x,\,y}$ and $N_{x,\,y}$.

Age o (y)	102		103			104		
Age of (x)	$\lambda\ D_{x,\,102}$	$\lambda\ N_{x,\,102}$	Age of (x)	$\lambda\ D_{x,\,103}$	$\lambda\ N_{x,\,103}$	Age of (x)	$\lambda\ D_{x,\,104}$	$\lambda\ N_{x,\,104}$
0	1·7225110	1·9795925	0	1·4611507	1·6828947	0	1·1856249	1·3430874
1	1·6532528	1·9291015	1	1·3918925	1·6296603	1	1·1163667	1·2847984
2	1·6190752	1·9018908	2	1·3577149	1·6013395	2	1·0821891	1·2545553
3	1·5970120	1·8829717	3	1·3356517	1·5818484	3	1·0601259	1·2341426
4	1·5799644	1·8678091	4	1·3186041	1·5663290	4	1·0430783	1·2180468
5	1·5657980	1·8548858	5	1·3044377	1·5531813	5	1·0289119	1·2045242
6	1·5535745	1·8434259	6	1·2922142	1·5415755	6	1·0166884	1·1926984
7	1·5425487	1·8328779	7	1·2811884	1·5309216	7	1·0056626	1·1818893
8	1·5321692	1·8229203	8	1·2708089	1·5208764	8	0·9952831	1·1717148
9	1·5224001	1·8134656	9	1·2610398	1·5113619	9	0·9855140	1·1620982
10	1·5130977	1·8043814	10	1·2517374	1·5022373	10	0·9762116	1·1529118
11	1·5041305	1·7955443	11	1·2427702	1·4933814	11	0·9672444	1·1440135
12	1·4953792	1·7868444	12	1·2340189	1·4846798	12	0·9584931	1·1353012
13	1·4867370	1·7781838	13	1·2253767	1·4760342	13	0·9498509	1·1266638
14	1·4781091	1·7694785	14	1·2167488	1·4673550	14	0·9412230	1·1180132
15	1·4694129	1·7606554	15	1·2080526	1·4585683	15	0·9325268	1·1092680
16	1·4605781	1·7516532	16	1·1992178	1·4496126	16	0·9236920	1·1003671
17	1·4515467	1·7424242	17	1·1901864	1·4404352	17	0·9146606	1·0912554
18	1·4422729	1·7329299	18	1·1809126	1·4309985	18	0·9053868	1·0818907
19	1·4327230	1·7231616	19	1·1713627	1·4212732	19	0·8958369	1·0722425
20	1·4228756	1·7131376	20	1·1615153	1·4112762	20	0·8859895	1·0622924
21	1·4127216	1·7029102	21	1·1513613	1·4010661	21	0·8758355	1·0521050
22	1·4024700	1·6925861	22	1·1411097	1·3907620	22	0·8655839	1·0418229
23	1·3921244	1·6821713	23	1·1307641	1·3803614	23	0·8552383	1·0314489
24	1·3816874	1·6716661	24	1·1203271	1·3698724	24	0·8448013	1·0209783
25	1·3711617	1·6610750	25	1·1098014	1·3592965	25	0·8342756	1·0104230
26	1·3605490	1·6503969	26	1·0991887	1·3486358	26	0·8236629	0·9997828
27	1·3498510	1·6396339	27	1·0884907	1·3378884	27	0·8129649	0·9890581
28	1·3390687	1·6287873	28	1·0777084	1·3270584	28	0·8021826	0·9782490
29	1·3282026	1·6178566	29	1·0668423	1·3161424	29	0·7913165	0·9673561
30	1·3172527	1·6068402	30	1·0558924	1·3051449	30	0·7803666	0·9563750
31	1·3062188	1·5957420	31	1·0448585	1·2940582	31	0·7693327	0·9453159
32	1·2951000	1·5845563	32	1·0337397	1·2828916	32	0·7582139	0·9341650
33	1·2838949	1·5732813	33	1·0225346	1·2716348	33	0·7470088	0·9229330
34	1·2726018	1·5619179	34	1·0112415	1·2602861	34	0·7357157	0·9116103
35	1·2612184	1·5504607	35	0·9998581	1·2488484	35	0·7243323	0·9001923
36	1·2497419	1·5389091	36	0·9883816	1·2373150	36	0·7128558	0·8886848
37	1·2381693	1·5272586	37	0·9768090	1·2256840	37	0·7012832	0·8770775
38	1·2264968	1·5155042	38	0·9651365	1·2139505	38	0·6896107	0·8653705
39	1·2147203	1·5036436	39	0·9533600	1·2021094	39	0·6778342	0·8535583
40	1·2028353	1·4916684	40	0·9414750	1·1901608	40	0·6659492	0·8416347
41	1·1908366	1·4795767	41	0·9294763	1·1780902	41	0·6539505	0·8295996
42	1·1787187	1·4673595	42	0·9173584	1·1658999	42	0·6418326	0·8174398
43	1·1664756	1·4550125	43	0·9051153	1·1535771	43	0·6295895	0·8051541
44	1·1541009	1·4425299	44	0·8927406	1·1411204	44	0·6172148	0·7927278
45	1·1415875	1·4299008	45	0·8802272	1·1285220	45	0·6047014	0·7801660
46	1·1289282	1·4171211	46	0·8675679	1·1157702	46	0·5920421	0·7674601
47	1·1161150	1·4041818	47	0·8547547	1·1028623	47	0·5792289	0·7545853
48	1·1031396	1·3910728	48	0·8417793	1·0897886	48	0·5662535	0·7415534
49	1·0899931	1·3777832	49	0·8286328	1·0765385	49	0·5531070	0·7283538
50	1·0766664	1·3643089	50	0·8153061	1·0630968	50	0·5397803	0·7149665
51	1·0631496	1·3506337	51	0·8017893	1·0494661	51	0·5262635	0·7013780
52	1·0494325	1·3367058	52	0·7880722	1·0356218	52	0·5125464	0·6876003
53	1·0355044	1·3224426	53	0·7741441	1·0214704	53	0·4986183	0·6735922
54	1·0213543	1·3076949	54	0·7599940	1·0068467	54	0·4844682	0·6591458

JOINT LIVES :—TWO FEMALES.

Logarithms of the Series $D_{x,y}$ and $N_{x,y}$.

Age of (y)	102			103			104	
Age of (x)	λ $D_{x,102}$	λ $N_{x,102}$	Age of (x)	λ $D_{x,103}$	λ $N_{x,103}$	Age of (x)	λ $D_{x,104}$	λ $N_{x,104}$
55	1·0063072	1·2921963	55	0·7449469	0·9914609	55	0·4694211	0·6439065
56	0·9906805	1·2760963	56	0·7293202	0·9754778	56	0·4537944	0·6280720
57	0·9744483	1·2593621	57	0·7130880	0·9588695	57	0·4375622	0·6116277
58	0·9575736	1·2419422	58	0·6962133	0·9415959	58	0·4206875	0·5945251
59	0·9400087	1·2237892	59	0·6786484	0·9235859	59	0·4031226	0·5767213
60	0·9216948	1·2048332	60	0·6603345	0·9047967	60	0·3848087	0·5581323
61	0·9025620	1·1849866	61	0·6412017	0·8851406	61	0·3656759	0·5387119
62	0·8825299	1·1641803	62	0·6211696	0·8645170	62	0·3456438	0·5183560
63	0·8615068	1·1422987	63	0·6001465	0·8428650	63	0·3246207	0·4969573
64	0·8393901	1·1192427	64	0·5780298	0·8200437	64	0·3025040	0·4744639
65	0·8160665	1·0948832	65	0·5547062	0·7959495	65	0·2791804	0·4506955
66	0·7914114	1·0690944	66	0·5300511	0·7704396	66	0·2545253	0·4255668
67	0·7652895	1·0417361	67	0·5039292	0·7433922	67	0·2284034	0·3989117
68	0·7375546	1·0126517	68	0·4761943	0·7146482	68	0·2006685	0·3706056
69	0·7080493	0·9816691	69	0·4466890	0·6840370	69	0·1711632	0·3404838
70	0·6766056	0·9486379	70	0·4152453	0·6513846	70	0·1397195	0·3083509
71	0·6430443	0·9133475	71	0·3816840	0·6165385	71	0·1061582	0·2740423
72	0·6071753	0·8756168	72	0·3458150	0·5792461	72	0·0702892	0·2373929
73	0·5687977	0·8352465	73	0·3074374	0·5393522	73	0·0319116	0·1981070
74	0·5276996	0·7919992	74	0·2663393	0·4966391	74	9·9908135	0·1560946
75	0·4836580	0·7456680	75	0·2222977	0·4508493	75	9·9467719	0·1110608
76	0·4364391	0·6960067	76	0·1750788	0·4017623	76	9·8995530	0·0627699
77	0·3857983	0·6427711	77	0·1244380	0·3491415	77	9·8489122	0·0109780
78	0·3314797	0·5857088	78	0·0701194	0·2926990	78	9·7945936	$\bar{1}$·9554472
79	0·2732168	0·5245259	79	0·0118565	0·2322081	79	9·7363307	$\bar{1}$·8958644
80	0·2107320	0·4589701	80	9·9493717	0·1673469	80	9·6738459	$\bar{1}$·8319977
81	0·1437368	0·3887759	81	9·8823765	0·0978471	81	9·6068507	$\bar{1}$·7635029
82	0·0719317	0·3135720	82	9·8105714	0·0234582	82	9·5350456	$\bar{1}$·6901961
83	9·9950064	0·2331231	83	9·7336461	$\bar{1}$·9437418	83	9·4581203	$\bar{1}$·6117233
84	9·9126394	0·1470577	84	9·6512791	$\bar{1}$·8584770	84	9·3757533	$\bar{1}$·5275010
85	9·8244987	0·0551106	85	9·5631384	$\bar{1}$·7673043	85	9·2876126	$\bar{1}$·4375920
86	9·7302408	$\bar{1}$·9567925	86	9·4688805	$\bar{1}$·6699674	86	9·1933547	$\bar{1}$·3414345
87	9·6295117	$\bar{1}$·8519917	87	9·3681514	$\bar{1}$·5658478	87	9·0926256	$\bar{1}$·2387986
88	9·5219463	$\bar{1}$·7401257	88	9·2605860	$\bar{1}$·4549972	88	8·9850602	$\bar{1}$·1290451
89	9·4071685	$\bar{1}$·6209684	89	9·1458082	$\bar{1}$·3366598	89	8·8702824	$\bar{1}$·0124154
90	9·2847914	$\bar{1}$·4941546	90	9·0234311	$\bar{1}$·2105860	90	8·7479053	$\bar{2}$·8876173
91	9·1544171	$\bar{1}$·3590762	91	8·8930568	$\bar{1}$·0766404	91	8·6175310	$\bar{2}$·7551123
92	9·0156367	$\bar{1}$·2153732	92	8·7542764	$\bar{2}$·9339932	92	8·4787506	$\bar{2}$·6138418
93	8·8680305	$\bar{1}$·0633334	93	8·6066702	$\bar{2}$·7817554	93	8·3311444	$\bar{2}$·4638930
94	8·7111676	$\bar{2}$·9014583	94	8·4498073	$\bar{2}$·6222140	94	8·1742815	$\bar{2}$·3031961
95	8·5446064	$\bar{2}$·7291648	95	8·2832461	$\bar{2}$·4517864	95	8·0077203	$\bar{2}$·1367206
96	8·3678944	$\bar{2}$·5477747	96	8·1065341	$\bar{2}$·2695129	96	7·8310083	$\bar{3}$·9590414
97	8·1805679	$\bar{2}$·3560259	97	7·9192076	$\bar{2}$·0791812	97	7·6436818	$\bar{3}$·7634280
98	7·9821526	$\bar{2}$·1492191	98	7·7207923	$\bar{3}$·8750613	98	7·4452665	$\bar{3}$·5682017
99	7·7721628	$\bar{3}$·9344985	99	7·5108025	$\bar{3}$·6532125	99	7·2352767	$\bar{3}$·3424227
100	7·5501023	$\bar{3}$·6989700	100	7·2887420	$\bar{3}$·4313638	100	7·0132162	$\bar{3}$·1139434
101	7·3154638	$\bar{3}$·4771213	101	7·0541035	$\bar{3}$·1760913	101	6·7785777	$\bar{4}$·9030900
102	7·0677290	$\bar{3}$·2304489	102	6·8063687	$\bar{4}$·9542425	102	6·5308429	$\bar{4}$·6020600
103	6·8063687	$\bar{4}$·9542425	103	6·5450084	$\bar{4}$·6989700	103	6·2694826	$\bar{4}$·4771213
104	6·5308429	$\bar{4}$·6020600	104	6·2694826	$\bar{4}$·4771213	104	5·9939568	
105	6·2406003		105	5·9792400		105	5·7037142	
106	5·9350791		106	5·6737188		106	5·3981930	
107	5·6137062		107	5·3523459		107	5·0768201	
108	5·2758978		108	5·0145375		108	4·7390117	
109	4·9210590		109	4·6596987		109	4·3841729	

JOINT LIVES :—Two Females.

Equal Ages.

Ages		$D_{x,\, y}$	$N_{x,\, y}$	Ages		$D_{x,\, y}$	$N_{x,\, y}$
x	y	Equal Ages.		x	y	Equal Ages.	
0	0	2,383,927	31,994,020	55	55	88,081·6	882,993·8
1	1	1,732,912	29,610,093	56	56	81,965·7	794,912·2
2	2	1,480,544	27,877,181	57	57	76,062·0	712,946·5
3	3	1,337,504	26,396,637	58	58	70,375·0	636,884·5
4	4	1,236,516	25,059,133	59	59	64,906·5	566,509·5
5	5	1,158,423	23,822,617	60	60	59,656·9	501,603·0
6	6	1,095,015	22,664,194	61	61	54,625·5	441,946·1
7	7	1,040,803	21,569,179	62	62	49,811·6	387,320·6
8	8	992,223	20,528,376	63	63	45,215·2	337,509·0
9	9	948,574	19,536,153	64	64	40,836·8	292,293·8
10	10	908,796	18,587,579	65	65	36,677·9	251,457·0
11	11	872,031	17,678,783	66	66	32,741·1	214,779·1
12	12	837,586	16,806,752	67	67	29,030·2	182,038·0
13	13	804,906	15,969,166	68	68	25,549·4	153,007·8
14	14	773,551	15,164,260	69	69	22,303·3	127,458·4
15	15	743,185	14,390,709	70	70	19,296·7	105,155·1
16	16	713,555	13,647,524	71	71	16,533·3	85,858·4
17	17	684,486	12,933,969	72	72	14,015·9	69,325·1
18	18	655,868	12,249,483	73	73	11,745·4	55,309·2
19	19	627,649	11,593,615	74	74	9,720·09	43,563·80
20	20	599,822	10,965,966	75	75	7,935·73	33,843·71
21	21	572,419	10,366,144	76	76	6,384·83	25,907·98
22	22	546,023	9,793,725	77	77	5,056·70	19,523·15
23	23	520,619	9,247,702	78	78	3,937·59	14,466·45
24	24	496,187	8,727,083	79	79	3,010·96	10,528·86
25	25	472,710	8,230,896	80	80	2,258·06	7,517·90
26	26	450,162	7,758,186	81	81	1,658·61	5,259·84
27	27	428,522	7,308,024	82	82	1,191·61	3,601·23
28	28	407,764	6,879,502	83	83	836·149	2,409·620
29	29	387,861	6,471,738	84	84	572·203	1,573·471
30	30	368,788	6,083,877	85	85	381·301	1,001·268
31	31	350,517	5,715,089	86	86	247·032	619·967
32	32	333,021	5,364,572	87	87	155·344	372·935
33	33	316,272	5,031,551	88	88	94·6594	217·5911
34	34	300,244	4,715,279	89	89	55·7966	122·9317
35	35	284,910	4,415,035	90	90	31·7581	67·1351
36	36	270,243	4,130,125	91	91	17·4223	35·3770
37	37	256,218	3,859,882	92	92	9·1948	17·9547
38	38	242,809	3,603,664	93	93	4·6594	8·7599
39	39	229,991	3,360,855	94	94	2·2626	4·1005
40	40	217,742	3,130,864	95	95	1·0507	1·8379
41	41	206,037	2,913,122	96	96	·4657	·7872
42	42	194,854	2,707,085	97	97	·1965	·3215
43	43	184,171	2,512,231	98	98	·0788	·1250
44	44	173,969	2,328,060	99	99	·0300	·0462
45	45	164,228	2,154,091	100	100	·0108	·0162
46	46	154,927	1,989,863	101	101	·0037	·0054
47	47	146,050	1,834,936	102	102	·0012	·0017
48	48	137,578	1,688,886	103	103	·0004	·0005
49	49	129,496	1,551,308	104	104	·0001	·0001
50	50	121,788	1,421,812	105	105	·0000	·0000
51	51	114,438	1,300,024				
52	52	107,433	1,185,586				
53	53	100,758	1,078,153				
54	54	94,401·6	977,395·4				

JOINT LIVES :—Two Females.

Difference of Age 1 Year.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 1 Year.**		x	y	**Difference of Age 1 Year.**	
1	0	2,032,520	30,759,894	56	55	84,968·6	837,596·3
2	1	1,601,766	28,727,374	57	56	78,958·7	752,627·7
3	2	1,407,208	27,125,608	58	57	73,163·2	673,669·0
4	3	1,286,019	25,718,400	59	58	67,585·5	600,505·8
5	4	1,196,832	24,432,381	60	59	62,226·4	532,920·3
6	5	1,126,273	23,235,549	61	60	57,085·8	470,693·9
7	6	1,067,565	22,109,276	62	61	52,163·0	413,608·1
8	7	1,016,223	21,041,711	63	62	47,457·8	361,445·1
9	8	970,153	20,025,488	64	63	42,970·2	313,987·3
10	9	928,472	19,055,335	65	64	38,701·5	271,017·1
11	10	890,224	18,126,863	66	65	34,653·6	232,315·6
12	11	854,635	17,236,639	67	66	30,829·9	197,662·0
13	12	821,083	16,382,004	68	67	27,234·2	166,832·1
14	13	789,073	15,560,921	69	68	23,871·2	139,597·9
15	14	758,216	14,771,848	70	69	20,745·6	115,726·7
16	15	728,219	14,013,632	71	70	17,861·6	94,981·1
17	16	698,869	13,285,413	72	71	15,222·7	77,119·5
18	17	670,024	12,586,544	73	72	12,830·5	61,896·8
19	18	641,604	11,916,520	74	73	10,684·8	49,066·3
20	19	613,578	11,274,916	75	74	8,782·71	38,381·51
21	20	585,960	10,661,338	76	75	7,118·16	29,598·80
22	21	559,065	10,075,378	77	76	5,682·09	22,480·64
23	22	533,170	9,516,313	78	77	4,462·20	16,798·55
24	23	508,256	8,983,143	79	78	3,443·24	12,336·35
25	24	484,306	8,474,887	80	79	2,607·47	8,893·11
26	25	461,298	7,990,581	81	80	1,935·26	6,285·64
27	26	439,209	7,529,283	82	81	1,405·85	4,350·38
28	27	418,014	7,090,074	83	82	998·180	2,944·531
29	28	397,688	6,672,060	84	83	691·698	1,946·351
30	29	378,204	6,274,372	85	84	467·099	1,254·653
31	30	359,536	5,896,168	86	85	306·910	787·554
32	31	341,657	5,536,632	87	86	195·895	480·644
33	32	324,538	5,194,975	88	87	121·263	284·749
34	33	308,154	4,870,437	89	88	72·6751	163·4857
35	34	292,477	4,562,283	90	89	42·0950	90·8106
36	35	277,480	4,269,806	91	90	23·5223	48·7156
37	36	263,137	3,992,326	92	91	12·6568	25·1933
38	37	249,423	3,729,189	93	92	6·5454	12·5365
39	38	236,313	3,479,766	94	93	3·2469	5·9911
40	39	223,783	3,243,453	95	94	1·5419	2·7442
41	40	211,808	3,019,670	96	95	·6995	1·2023
42	41	200,367	2,807,862	97	96	·3025	·5028
43	42	189,437	2,607,495	98	97	·1244	·2003
44	43	178,998	2,418,058	99	98	·0486	·0759
45	44	169,028	2,239,060	100	99	·0180	·0273
46	45	159,510	2,070,032	101	100	·0063	·0093
47	46	150,423	1,910,522	102	101	·0021	·0030
48	47	141,751	1,760,099	103	102	·0006	·0009
49	48	133,476	1,618,348	104	103	·0002	·0003
50	49	125,583	1,484,872	105	104	·0001	·0001
51	50	118,056	1,359,289				
52	51	110,880	1,241,233				
53	52	104,042	1,130,353				
54	53	97,528·1	1,026,311·3				
55	54	91,186·9	928,783·2				

JOINT LIVES :—Two Females.

Difference of Age 2 Years.

Difference of Age 105 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Difference of Age 2 Years.**	
2	0	1,878,699	29,827,914
3	1	1,522,425	27,949,215
4	2	1,353,040	26,426,790
5	3	1,244,747	25,073,750
6	4	1,163,617	23,829,003
7	5	1,098,039	22,665,386
8	6	1,042,353	21,567,347
9	7	993,619	20,524,994
10	8	949,594	19,531,375
11	9	909,498	18,581,781
12	10	872,465	17,672,283
13	11	837,796	16,799,818
14	12	804,932	15,962,022
15	13	773,430	15,157,090
16	14	742,948	14,383,660
17	15	713,232	13,640,712
18	16	684,104	12,927,480
19	17	655,452	12,243,376
20	18	627,219	11,587,924
21	19	599,398	10,960,705
22	20	572,291	10,361,307
23	21	545,905	9,789,016
24	22	520,509	9,243,111
25	23	496,086	8,722,602
26	24	472,615	8,226,516
27	25	450,074	7,753,901
28	26	428,439	7,303,827
29	27	407,685	6,875,388
30	28	387,786	6,467,703
31	29	368,716	6,079,917
32	30	350,448	5,711,201
33	31	332,954	5,360,753
34	32	316,208	5,027,799
35	33	300,182	4,711,591
36	34	284,849	4,411,409
37	35	270,183	4,126,560
38	36	256,159	3,856,377
39	37	242,751	3,600,218
40	38	229,934	3,357,467
41	39	217,685	3,127,533
42	40	205,980	2,909,848
43	41	194,797	2,703,868
44	42	184,116	2,509,071
45	43	173,914	2,324,955
46	44	164,172	2,151,041
47	45	154,872	1,986,869
48	46	145,995	1,831,997
49	47	137,524	1,686,002
50	48	129,443	1,548,478
51	49	121,735	1,419,035
52	50	114,385	1,297,300
53	51	107,380	1,182,915
54	52	100,707	1,075,535
55	53	94,206·9	974,828·1
56	54	87,964·2	880,621·2
57	55	81,851·5	792,657·0
58	56	75,949·5	710,805·5
59	57	70,263·2	634,856·0
60	58	64,794·7	564,592·8
61	59	59,544·5	499,798·1
62	60	54,512·5	440,253·6
63	61	49,698·1	385,741·1
64	62	45,101·5	336,043·0
65	63	40,723·4	290,941·5
66	64	36,565·6	250,218·1
67	65	32,630·7	213,652·5
68	66	28,922·6	181,021·8
69	67	25,445·4	152,099·2
70	68	22,204·0	126,653·8
71	69	19,202·8	104,449·8
72	70	16,445·7	85,247·0
73	71	13,935·2	68,801·3
74	72	11,672·0	54,866·1
75	73	9,654·43	43,194·05
76	74	7,877·89	33,539·62
77	75	6,334·72	25,661·73
78	76	5,014·06	19,327·01
79	77	3,901·99	14,312·95
80	78	2,981·83	10,410·96
81	79	2,234·73	7,429·13
82	80	1,640·34	5,194·40
83	81	1,177·64	3,554·06
84	82	825·738	2,376·421
85	83	564·646	1,550·683
86	84	375·968	986·037
87	85	243·378	610·069
88	86	152·918	366·691
89	87	93·1003	213·7734
90	88	54·8288	120·6731
91	89	31·1786	65·8443
92	90	17·0883	34·6657
93	91	9·0099	17·5774
94	92	4·5612	8·5675
95	93	2·2126	4·0063
96	94	1·0264	1·7937
97	95	·4544	·7673
98	96	·1916	·3129
99	97	·0767	·1213
100	98	·0291	·0446
101	99	·0105	·0155
102	100	·0035	·0050
103	101	·0011	·0015
104	102	·0003	·0004
105	103	·0001	·0001
		Difference of Age 105 Years.	
105	0	7·8593	7·8593

JOINT LIVES :—Two Females.

Difference of Age 3 Years.

Difference of Age 104 Years.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$	Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
		Difference of Age 3 Years.				**Difference of Age 3 Years.**	
3	0	1,785,640	29,012,311	58	55	78,732·1	748,241·4
4	1	1,463,822	27,226,671	59	56	72,939·1	669,509·3
5	2	1,309,617	25,762,849	60	57	67,361·9	596,570·2
6	3	1,210,201	24,453,232	61	58	62,002·1	529,208·3
7	4	1,134,447	23,243,031	62	59	56,860·4	467,206·2
8	5	1,072,107	22,108,584	63	60	51,936·5	410,345·8
9	6	1,019,168	21,036,477	64	61	47,230·6	358,409·3
10	7	972,562	20,017,309	65	62	42,743·2	311,178·7
11	8	930,188	19,044,747	66	63	38,475·9	268,435·5
12	9	891,354	18,114,559	67	64	34,431·1	229,959·6
13	10	855,275	17,223,205	68	65	30,612·0	195,528·5
14	11	821,317	16,367,930	69	66	27,022·9	164,916·5
15	12	788,975	15,546,613	70	67	23,668·2	137,893·6
16	13	757,855	14,757,638	71	68	20,552·7	114,225·4
17	14	727,657	13,999,783	72	69	17,680·5	93,672·7
18	15	698,163	13,272,126	73	70	15,054·8	75,992·2
19	16	669,225	12,573,963	74	71	12,677·0	60,937·4
20	17	640,757	11,904,738	75	72	10,546·4	48,260·4
21	18	612,725	11,263,981	76	73	8,659·80	37,714·00
22	19	585,415	10,651,256	77	74	7,010·82	29,054·20
23	20	558,819	10,065,841	78	75	5,589·96	22,043·38
24	21	532,942	9,507,022	79	76	4,384·57	16,453·42
25	22	508,046	8,974,080	80	77	3,379·10	12,068·85
26	23	484,110	8,466,034	81	78	2,555·57	8,689·75
27	24	461,115	7,981,924	82	79	1,894·17	6,134·18
28	25	439,037	7,520,809	83	80	1,374·07	4,240·01
29	26	417,852	7,081,772	84	81	974·198	2,865·941
30	27	397.534	6,663,920	85	82	674·064	1,891·743
31	28	378,058	6,266,386	86	83	454·484	1,217·679
32	29	359,396	5,888,328	87	84	298·141	763·195
33	30	341,522	5,528,932	88	85	189·984	465·054
34	31	324,408	5,187,410	89	86	117·403	275·070
35	32	308,027	4,863,002	90	87	70·2383	157·6673
36	33	292,353	4,554,975	91	88	40·6101	87·4290
37	34	277,359	4,262,622	92	89	22·6504	46·8189
38	35	263,018	3,985,263	93	90	12·1645	24·1685
39	36	249,306	3,722,245	94	91	6·2785	12·0040
40	37	236,198	3,472,939	95	92	3·1082	5·7255
41	38	223,668	3,236,741	96	93	1·4730	2·6173
42	39	211,695	3,013,073	97	94	·6668	1·1443
43	40	200,254	2,801,378	98	95	·2878	·4775
44	41	189,325	2,601,124	99	96	·1181	·1897
45	42	178,886	2,411,799	100	97	·0460	·0716
46	43	168,918	2,232,913	101	98	·0170	·0256
47	44	159,399	2,063,995	102	99	·0059	·0086
48	45	150,314	1,904,596	103	100	·0019	·0027
49	46	141,642	1,754,282	104	101	·0006	·0008
50	47	133,368	1,612,640	105	102	·0002	·0002
51	48	125,476	1,479,272				
52	49	117,950	1,353,796				
53	50	110,775	1,235,846			**Difference of Age 104 Years.**	
54	51	103,938	1,125,071				
55	52	97,277·1	1,021,133·0				
56	53	90,877·4	923,855·9	104	0	15·3329	22·0337
57	54	84,737·1	832,978·5	105	1	6·7008	6·7008

JOINT LIVES :—Two Females.

Difference of Age 4 Years.
Difference of Age 103 Years.

Ages		$D_{x,\ y}$	$N_{x,\ y}$
x	*y*	**Difference of Age 4 Years.**	
4	0	1,716,906	28,257,726
5	1	1,416,843	26,540,820
6	2	1,273,271	25,123,977
7	3	1,179,863	23,850,706
8	4	1,107,655	22,670,843
9	5	1,048,260	21,563,188
10	6	997,569	20,514,928
11	7	952,687	19,517,359
12	8	911,632	18,564,672
13	9	873,792	17,653,040
14	10	838,451	16,779,248
15	11	805,034	15,940,797
16	12	773,087	15,135,763
17	13	742,258	14,362,676
18	14	712,284	13,620,418
19	15	682,978	12,908,134
20	16	654,221	12,225,156
21	17	625,950	11,570,935
22	18	598,431	10,944,985
23	19	571,635	10,346,554
24	20	545,549	9,774,919
25	21	520,181	9,229,370
26	22	495,781	8,709,189
27	23	472,331	8,213,408
28	24	449,808	7,741,077
29	25	428,189	7,291,269
30	26	407,448	6,863,080
31	27	387,562	6,455,632
32	28	368,502	6,068,070
33	29	350,242	5,699,568
34	30	332,756	5,349,326
35	31	316,015	5,016,570
36	32	299,994	4,700,555
37	33	284,666	4,400,561
38	34	270,004	4,115,895
39	35	255,982	3,845,891
40	36	242,576	3,589,909
41	37	229,761	3,347,333
42	38	217,514	3,117,572
43	39	205,810	2,900,058
44	40	194,629	2,694,248
45	41	183,948	2,499,619
46	42	173,747	2,315,671
47	43	164,007	2,141,924
48	44	154,708	1,977,917
49	45	145,832	1,823,209
50	46	137,362	1,677,377
51	47	129,281	1,540,015
52	48	121,575	1,410,734
53	49	114,227	1,289,159
54	50	107,224	1,174,932
55	51	100,399	1,067,708
56	52	93,839·1	967,309·2
57	53	87,543·5	873,470·1
58	54	81,507·8	785,926·6
59	55	75,611·3	704,418·8
60	56	69,927·2	628,807·5
61	57	64,458·7	558,880·3
62	58	59,207·2	494,421·6
63	59	54,173·5	435,214·4
64	60	49,357·8	381,040·9
65	61	44,761·0	331,683·1
66	62	40,384·3	286,922·1
67	63	36,229·9	246,537·8
68	64	32,301·0	210,307·9
69	65	28,601·4	178,006·9
70	66	25,135·5	149,405·5
71	67	21,908·1	124,270·0
72	68	18,923·5	102,361·9
73	69	16,185·2	83,438·4
74	70	13,695·4	67,253·2
75	71	11,454·4	53,557·8
76	72	9,459·87	42,103·37
77	73	7,706·67	32,643·50
78	74	6,186·58	24,936·83
79	75	4,888·16	18,750·25
80	76	3,797·01	13,862·09
81	77	2,896·05	10,065·08
82	78	2,166·12	7,169·03
83	79	1,586·70	5,002·91
84	80	1,136·69	3,416·21
85	81	795·255	2,279·523
86	82	542·555	1,484·268
87	83	360·404	941·713
88	84	232·732	581·309
89	85	145·861	348·577
90	86	88·5734	202·7158
91	87	52·0235	114·1424
92	88	29·5022	62·1189
93	89	16·1239	32·6167
94	90	8·4768	16·4928
95	91	4·2785	8·0160
96	92	2·0692	3·7375
97	93	·9569	1·6683
98	94	·4223	·7114
99	95	·1774	·2891
100	96	·0708	·1117
101	97	·0268	·0409
102	98	·0096	·0141
103	99	·0032	·0045
104	100	·0010	·0013
105	101	·0003	·0003
		Difference of Age 103 Years.	
103	0	28·9168	48·1831
104	1	13·0727	19·2663
105	2	6·1936	6·1936

JOINT LIVES :—TWO FEMALES.

Difference of Age 5 Years.

Difference of Age 102 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 5 Years.**	
5	0	1,661,805	27,543,092
6	1	1,377,521	25,881,287
7	2	1,241,352	24,503,766
8	3	1,151,999	23,262,414
9	4	1,083,017	22,110,415
10	5	1,026,046	21,027,398
11	6	977,183	20,001,352
12	7	933,682	19,024,169
13	8	893,670	18,090,487
14	9	856,604	17,196,817
15	10	821,829	16,340,213
16	11	788,823	15,518,384
17	12	757,176	14,729,561
18	13	726,576	13,972,385
19	14	696,792	13,245,809
20	15	667,666	12,549,017
21	16	639,103	11,881,351
22	17	611,347	11,242,248
23	18	584,344	10,630,901
24	19	558,061	10,046,557
25	20	532,486	9,488,496
26	21	507,623	8,956,010
27	22	483,718	8,448,387
28	23	460,749	7,964,669
29	24	438,693	7,503,920
30	25	417,528	7,065,227
31	26	397,227	6,647,699
32	27	377,765	6,250,472
33	28	359,116	5,872,707
34	29	341,252	5,513,591
35	30	324,147	5,172,339
36	31	307,774	4,848,192
37	32	292,106	4,540,418
38	33	277,117	4,248,312
39	34	262,780	3,971,195
40	35	249,072	3,708,415
41	36	235,966	3,459,343
42	37	223,439	3,223,377
43	38	211,467	2,999,938
44	39	200,029	2,788,471
45	40	189,101	2,588,442
46	41	178,663	2,399,341
47	42	168,696	2,220,678
48	43	159,179	2,051,982
49	44	150,095	1,892,803
50	45	141,425	1,742,708
51	46	133,152	1,601,283
52	47	125,262	1,468,131
53	48	117,738	1,342,869
54	49	110,565	1,225,131
55	50	103,573	1,114,566
56	51	96,850·3	1,010,992·8
57	52	90,396·5	914,142·5
58	53	84,207·2	823,746·0
59	54	78,277·0	739,538·8
60	55	72,489·2	661,261·8
61	56	66,913·5	588,772·6
62	57	61,553·0	521,859·1
63	58	56,409·4	460,306·1
64	59	51,483·7	403,896·7
65	60	46,777·0	352,413·0
66	61	42,290·6	305,636·0
67	62	38,026·9	263,345·4
68	63	33,988·5	225,318·5
69	64	30,179·4	191,330·0
70	65	26,603·8	161,150·6
71	66	23,266·3	134,546·8
72	67	20,171·4	111,280·5
73	68	17,323·0	91,109·1
74	69	14,723·8	73,786·1
75	70	12,374·7	59,062·3
76	71	10,274·3	46,687·6
77	72	8,418·69	36,413·27
78	73	6,800·62	27,994·58
79	74	5,409·88	21,193·96
80	75	4,233·12	15,784·08
81	76	3,254·22	11,550·96
82	77	2,454·71	8,296·74
83	78	1,814·50	5,842·03
84	79	1,312·58	4,027·53
85	80	927·901	2,714·946
86	81	640·101	1,787·045
87	82	430·244	1,146·944
88	83	281·335	716·700
89	84	178·681	435·365
90	85	110·043	256·684
91	86	65·6038	146·6407
92	87	37·7937	81·0369
93	88	21·0014	43·2432
94	89	11·2359	22·2418
95	90	5·7766	11·0059
96	91	2·8483	5·2293
97	92	1·3442	2·3810
98	93	·6060	1·0368
99	94	·2604	·4308
100	95	·1064	·1704
101	96	·0413	·0640
102	97	·0152	·0227
103	98	·0053	·0075
104	99	·0017	·0022
105	100	·0005	·0005

Difference of Age 102 Years.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
102	0	52·7851	95·4097
103	1	24·6543	42·6246
104	2	12·0834	17·9703
105	3	5·8869	5·8869

JOINT LIVES :—Two Females.

Difference of Age 6 Years.

Difference of Age 101 Years.

Difference of Age 6 Years.

Ages *x*	Ages *y*	$D_{x,y}$	$N_{x,y}$
6	0	1,615,684	26,856,997
7	1	1,342,989	25,241,313
8	2	1,212,036	23,898,324
9	3	1,126,375	22,686,288
10	4	1,060,067	21,559,913
11	5	1,005,077	20,499,846
12	6	957,689	19,494,769
13	7	915,286	18,537,080
14	8	876,091	17,621,794
15	9	839,622	16,745,703
16	10	805,280	15,906,081
17	11	772,588	15,100,801
18	12	741,179	14,328,213
19	13	710,773	13,587,034
20	14	681,170	12,876,261
21	15	652,237	12,195,091
22	16	624,193	11,542,854
23	17	596,956	10,918,661
24	18	570,468	10,321,705
25	19	544,698	9,751,237
26	20	519,632	9,206,539
27	21	495,272	8,686,907
28	22	471,856	8,191,635
29	23	449,364	7,719,779
30	24	427,771	7,270,415
31	25	407,053	6,842,644
32	26	387,186	6,435,591
33	27	368,143	6,048,405
34	28	349,898	5,680,262
35	29	332,424	5,330,364
36	30	315,694	4,997,940
37	31	299,681	4,682,246
38	32	284,360	4,382,565
39	33	269,703	4,098,205
40	34	255,687	3,828,502
41	35	242,285	3,572,815
42	36	229,473	3,330,530
43	37	217,228	3,101,057
44	38	205,527	2,883,829
45	39	194,347	2,678,302
46	40	183,668	2,483,955
47	41	173,469	2,300,287
48	42	163,730	2,126,818
49	43	154,433	1,963,088
50	44	145,559	1,808,655
51	45	137,091	1,663,096
52	46	129,012	1,526,005
53	47	121,308	1,396,993
54	48	113,963	1,275,685
55	49	106,800	1,161,722
56	50	99,912·0	1,054,922·0
57	51	93,297·3	955,010·0
58	52	86,951·5	861,712·7
59	53	80,869·4	774,761·2
60	54	75,044·7	693,891·8
61	55	69,365·0	618,847·1
62	56	63,897·1	549,482·1
63	57	58,644·3	485,585·0
64	58	53,608·6	426,940·7
65	59	48,791·7	373,332·1
66	60	44,195·4	324,540·4
67	61	39,821·9	280,345·0
68	62	35,674·3	240,523·1
69	63	31,756·1	204,848·8
70	64	28,071·6	173,092·7
71	65	24,625·3	145,021·1
72	66	21,421·9	120,395·8
73	67	18,465·4	98,973·9
74	68	15,758·9	80,508·5
75	69	13,303·9	64,749·6
76	70	11,099·8	51,445·7
77	71	9,143·52	40,345·91
78	72	7,428·93	31,202·39
79	73	5,946·83	23,773·46
80	74	4,684·92	17,826·63
81	75	3,627·99	13,141·71
82	76	2,758·30	9,513·72
83	77	2,056·25	6,755·42
84	78	1,501·03	4,699·17
85	79	1,071·49	3,198·14
86	80	746·868	2,126·652
87	81	507·597	1,379·784
88	82	335·853	872·187
89	83	215·996	536·334
90	84	134·804	320·338
91	85	81·5055	185·5344
92	86	47·6594	104·0289
93	87	26·9038	56·3695
94	88	14·6347	29·4657
95	89	7·6568	14·8310
96	90	3·8455	7·1742
97	91	1·8504	3·3287
98	92	·8513	1·4783
99	93	·3736	·6270
100	94	·1561	·2534
101	95	·0620	·0973
102	96	·0233	·0353
103	97	·0083	·0120
104	98	·0028	·0037
105	99	·0009	·0009

Difference of Age 101 Years.

Ages *x*	Ages *y*	$D_{x,y}$	$N_{x,y}$
101	0	93·3783	178·3162
102	1	45·0042	84·9379
103	2	22·7885	39·9337
104	3	11·4849	17·1452
105	4	5·6603	5·6603

JOINT LIVES :—Two Females.

Difference of Age 7 Years.

Difference of Age 100 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Difference of Age 7 Years.**	
7	0	1,575,182	26,191,976
8	1	1,311,273	24,616,794
9	2	1,185,076	23,305,521
10	3	1,102,505	22,120,445
11	4	1,038,403	21,017,940
12	5	985,027	19,979,537
13	6	938,820	18,994,510
14	7	897,282	18,055,690
15	8	858,723	17,158,408
16	9	822,715	16,299,685
17	10	788,707	15,476,970
18	11	756,266	14,688,263
19	12	725,059	13,931,997
20	13	694,838	13,206,938
21	14	665,429	12,512,100
22	15	637,021	11,846,671
23	16	609,500	11,209,650
24	17	582,781	10,600,150
25	18	556,808	10,017,369
26	19	531,549	9,460,561
27	20	506,988	8,929,012
28	21	483,127	8,422,024
29	22	460,197	7,938,897
30	23	438,176	7,478,700
31	24	417,039	7,040,524
32	25	396,764	6,623,485
33	26	377,324	6,226,721
34	27	358,694	5,849,397
35	28	340,846	5,490,703
36	29	323,754	5,149,857
37	30	307,392	4,826,103
38	31	291,734	4,518,711
39	32	276,752	4,226,977
40	33	262,423	3,950,225
41	34	248,719	3,687,802
42	35	235,618	3,439,083
43	36	223,094	3,203,465
44	37	211,126	2,980,371
45	38	199,690	2,769,245
46	39	188,764	2,569,555
47	40	178,329	2,380,791
48	41	168,363	2,202,462
49	42	158,848	2,034,099
50	43	149,766	1,875,251
51	44	141,098	1,725,485
52	45	132,828	1,584,387
53	46	124,941	1,451,559
54	47	117,420	1,326,618
55	48	110,082	1,209,198
56	49	103,025	1,099,116
57	50	96,246·7	996,090·8
58	51	89,741·7	899,844·1
59	52	83,504·9	810,102·4
60	53	77,530·1	726,597·5
61	54	71,810·4	649,067·4
62	55	66,238·1	577,257·0
63	56	60,877·7	511,018·9
64	57	55,732·6	450,141·2
65	58	50,805·5	394,408·6
66	59	46,099·0	343,603·1
67	60	41,615·5	297,504·1
68	61	37,358·3	255,888·6
69	62	33,331·1	218,530·3
70	63	29,538·2	185,199·2
71	64	25,984·0	155,661·0
72	65	22,673·2	129,677·0
73	66	19,610·1	107,003·8
74	67	16,798·1	87,393·7
75	68	14,239·1	70,595·6
76	69	11,933·3	56,356·5
77	70	9,878·13	44,423·16
78	71	8,068·54	34,545·03
79	72	6,496·25	26,476·49
80	73	5,149·92	19,980·24
81	74	4,015·20	14,830·32
82	75	3,075·11	10,815·12
83	76	2,310·56	7,740·01
84	77	1,701·02	5,429·45
85	78	1,225·32	3,728·43
86	79	862·439	2,503·110
87	80	592·263	1,640·671
88	81	396·236	1,048·408
89	82	257·852	652·172
90	83	162·955	394·320
91	84	99·8453	231·3651
92	85	59·2115	131·5198
93	86	33·9267	72·3083
94	87	18·7478	38·3816
95	88	9·9730	19·6338
96	89	5·0972	9·6608
97	90	2·4982	4·5636
98	91	1·1718	2·0654
99	92	·5249	·8936
100	93	·2241	·3687
101	94	·0910	·1446
102	95	·0350	·0536
103	96	·0128	·0186
104	97	·0044	·0058
105	98	·0014	·0014
		Difference of Age 100 Years.	
100	0	160·282	319·675
101	1	79·6137	159·3931
102	2	41·5983	79·7794
103	3	21·6597	38·1811
104	4	11·0428	16·5214
105	5	5·4786	5·4786

JOINT LIVES :—Two Females.

Difference of Age 8 Years.

Difference of Age 99 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	Difference of Age 8 Years.	
8	0	1,537,982	25,543,474
9	1	1,282,106	24,005,492
10	2	1,159,962	22,723,386
11	3	1,079,974	21,563,424
12	4	1,017,688	20,483,450
13	5	965,619	19,465,762
14	6	920,353	18,500,143
15	7	879,493	17,579,790
16	8	841,431	16,700,297
17	9	805,782	15,858,866
18	10	772,043	15,053,084
19	11	739,817	14,281,041
20	12	708,803	13,541,224
21	13	678,781	12,832,421
22	14	649,905	12,153,640
23	15	622,026	11,503,735
24	16	595,027	10,881,709
25	17	568,826	10,286,682
26	18	543,367	9,717,856
27	19	518,615	9,174,489
28	20	494,556	8,655,874
29	21	471,189	8,161,318
30	22	448,739	7,690,129
31	23	427,183	7,241,390
32	24	406,498	6,814,207
33	25	386,659	6,407,709
34	26	367,639	6,021,050
35	27	349,414	5,653,411
36	28	331,957	5,303,997
37	29	315,241	4,972,040
38	30	299,241	4,656,799
39	31	283,929	4,357,558
40	32	269,281	4,073,629
41	33	255,272	3,804,348
42	34	241,875	3,549,076
43	35	229,068	3,307,201
44	36	216,827	3,078,133
45	37	205,129	2,861,306
46	38	193,953	2,656,177
47	39	183,276	2,462,224
48	40	173,080	2,278,948
49	41	163,343	2,105,868
50	42	154,048	1,942,525
51	43	145,176	1,788,477
52	44	136,711	1,643,301
53	45	128,636	1,506,590
54	46	120,935	1,377,954
55	47	113,421	1,257,019
56	48	106,192	1,143,598
57	49	99,245·9	1,037,405·5
58	50	92,578·7	938,159·6
59	51	86,184·5	845,580·9
60	52	80,056·8	759,396·4
61	53	74,188·6	679,339·6
62	54	68,573·3	605,151·0
63	55	63,108·1	536,577·7
64	56	57,855·1	473,469·6
65	57	52,818·5	415,614·5
66	58	48,001·6	362,796·0
67	59	43,407·9	314,794·4
68	60	39,041·0	271,386·5
69	61	34,904·6	232,345·5
70	62	31,003·2	197,440·9
71	63	27,341·5	166,437·7
72	64	23,924·1	139,096·2
73	65	20,755·6	115,172·1
74	66	17,839·5	94,416·5
75	67	15,178·1	76,577·0
76	68	12,772·2	61,398·9
77	69	10,619·9	48,626·7
78	70	8,716·78	38,006·84
79	71	7,055·57	29,290·06
80	72	5,625·72	22,234·49
81	73	4,413·73	16,608·77
82	74	3,403·32	12,195·04
83	75	2,575·94	8,791·72
84	76	1,911·39	6,215·78
85	77	1,388·57	4,304·39
86	78	986·260	2,915·822
87	79	683·911	1,929·562
88	80	462·327	1,245·651
89	81	304·212	783·324
90	82	194·533	479·112
91	83	120·696	284·579
92	84	72·5349	163·8826
93	85	42·1502	91·3477
94	86	23·6417	49·1975
95	87	12·7758	25·5558
96	88	6·6391	12·7800
97	89	3·3114	6·1409
98	90	1·5820	2·8295
99	91	·7225	1·2475
100	92	·3148	·5250
101	93	·1305	·2102
102	94	·0514	·0797
103	95	·0192	·0283
104	96	·0068	·0091
105	97	·0023	·0023

Difference of Age 99 Years.

x	y	$D_{x, y}$	$N_{x, y}$
99	0	267·267	553·889
100	1	136·655	286·622
101	2	73·5885	149·9671
102	3	39·5378	76·3786
103	4	20·8259	36·8408
104	5	10·6884	16·0149
105	6	5·3265	5·3265

JOINT LIVES:—Two Females.

Difference of Age 9 Years.

Difference of Age 98 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 9 Years.**	
9	0	1,503,772	24,909,131
10	1	1,254,936	23,405,359
11	2	1,136,257	22,150,423
12	3	1,058,430	21,014,166
13	4	997,637	19,955,736
14	5	946,625	18,958,099
15	6	902,108	18,011,474
16	7	861,783	17,109,366
17	8	824,113	16,247,583
18	9	788,758	15,423,470
19	10	755,252	14,634,712
20	11	723,231	13,879,460
21	12	692,423	13,156,229
22	13	662,946	12,463,806
23	14	634,606	11,800,860
24	15	607,255	11,166,254
25	16	580,779	10,558,999
26	17	555,094	9,978,220
27	18	530,145	9,423,126
28	19	505,898	8,892,981
29	20	482,335	8,387,083
30	21	459,457	7,904,748
31	22	437,482	7,445,291
32	23	416,385	7,007,809
33	24	396,144	6,591,424
34	25	376,734	6,195,280
35	26	358,128	5,818,546
36	27	340,302	5,460,418
37	28	323,228	5,120,116
38	29	306,881	4,796,888
39	30	291,235	4,490,007
40	31	276,265	4,198,772
41	32	261,943	3,922,507
42	33	248,247	3,660,564
43	34	235,152	3,412,317
44	35	222,633	3,177,165
45	36	210,669	2,954,532
46	37	199,236	2,743,863
47	38	188,314	2,544,627
48	39	177,882	2,356,313
49	40	167,919	2,178,431
50	41	158,407	2,010,512
51	42	149,327	1,852,105
52	43	140,663	1,702,778
53	44	132,396	1,562,115
54	45	124,512	1,429,719
55	46	116,817	1,305,207
56	47	109,412	1,188,390
57	48	102,296	1,078,978
58	49	95,463·6	976,681·9
59	50	88,909·1	881,218·3
60	51	82,625·8	792,309·2
61	52	76,606·5	709,683·4
62	53	70,844·4	633,076·9
63	54	65,332·9	562,232·5
64	55	59,974·7	496,899·6
65	56	54,830·0	436,924·9
66	57	49,903·5	382,094·9
67	58	45,199·6	332,191·4
68	59	40,722·5	286,991·8
69	60	36,476·7	246,269·3
70	61	32,466·7	209,792·6
71	62	28,697·6	177,325·9
72	63	25,174·1	148,628·3
73	64	21,900·7	123,454·2
74	65	18,881·5	101,553·5
75	66	16,119·1	82,672·0
76	67	13,614·4	66,552·9
77	68	11,366·4	52,938·5
78	69	9,371·30	41,572·14
79	70	7,622·43	32,200·84
80	71	6,110·09	24,578·41
81	72	4,821·51	18,468·32
82	73	3,741·11	13,646·81
83	74	2,850·87	9,905·70
84	75	2,130·93	7,054·83
85	76	1,560·30	4,923·90
86	77	1,117·66	3,363·60
87	78	782·100	2,245·939
88	79	533·868	1,463·839
89	80	354·953	929·971
90	81	229·509	575·018
91	82	144·085	345·509
92	83	87·6827	201·4235
93	84	51·6346	113·7408
94	85	29·3723	62·1062
95	86	16·1108	32·7339
96	87	8·5051	16·6231
97	88	4·3131	8·1180
98	89	2·0970	3·8049
99	90	·9755	1·7079
100	91	·4333	·7324
101	92	·1834	·2991
102	93	·0738	·1157
103	94	·0282	·0419
104	95	·0102	·0137
105	96	·0035	·0035

Difference of Age 98 Years.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
98	0	433·446	931·330
99	1	227·870	497·884
100	2	126·313	270·014
101	3	69·9434	143·7014
102	4	38·0158	73·7580
103	5	20·1575	35·7422
104	6	10·3917	15·5847
105	7	5·1930	5·1930

JOINT LIVES :—Two Females.

Difference of Age 10 Years.

Difference of Age 97 Years.

Difference of Age 10 Years.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
10	0	1,471,905	24,286,718
11	1	1,229,290	22,814,813
12	2	1,113,590	21,585,523
13	3	1,037,576	20,471,933
14	4	978,013	19,434,357
15	5	927,859	18,456,344
16	6	883,942	17,528,485
17	7	844,047	16,644,543
18	8	806,702	15,800,496
19	9	771,603	14,993,794
20	10	738,320	14,222,191
21	11	706,518	13,483,871
22	12	676,270	12,777,353
23	13	647,340	12,101,083
24	14	619,537	11,453,743
25	15	592,715	10,834,206
26	16	566,759	10,241,491
27	17	541,588	9,674,732
28	18	517,145	9,133,144
29	19	493,397	8,615,999
30	20	470,326	8,122,602
31	21	447,931	7,652,276
32	22	426,423	7,204,345
33	23	405,780	6,777,922
34	24	385,976	6,372,142
35	25	366,987	5,986,166
36	26	348,788	5,619,179
37	27	331,353	5,270,391
38	28	314,656	4,939,038
39	29	298,672	4,624,382
40	30	283,373	4,325,710
41	31	268,736	4,042,337
42	32	254,736	3,773,601
43	33	241,347	3,518,865
44	34	228,546	3,277,518
45	35	216,310	3,048,972
46	36	204,617	2,832,662
47	37	193,444	2,628,045
48	38	182,771	2,434,601
49	39	172,578	2,251,830
50	40	162,844	2,079,252
51	41	153,553	1,916,408
52	42	144,685	1,762,855
53	43	136,223	1,618,170
54	44	128,152	1,481,947
55	45	120,272	1,353,795
56	46	112,689	1,233,523
57	47	105,398	1,120,834
58	48	98,397·5	1,015,435·5
59	49	91,679·6	917,038·0
60	50	85,237·8	825,358·4
61	51	79,064·7	740,120·6
62	52	73,153·2	661,055·9
63	53	67,496·6	587,902·7
64	54	62,089·1	520,406·1
65	55	56,838·8	458,317·0
66	56	51,803·9	401,478·2
67	57	46,990·4	349,674·3
68	58	42,403·3	302,683·9
69	59	38,047·8	260,280·6
70	60	33,929·0	222,232·8
71	61	30,052·3	188,303·8
72	62	26,422·6	158,251·5
73	63	23,044·9	131,828·9
74	64	19,923·3	108,784·0
75	65	17,060·6	88,860·7
76	66	14,458·4	71,800·1
77	67	12,116·0	57,341·7
78	68	10,030·1	45,225·7
79	69	8,194·78	35,195·57
80	70	6,600·98	27,000·79
81	71	5,236·63	20,399·81
82	72	4,086·75	15,163·18
83	73	3,133·83	11,076·43
84	74	2,358·36	7,942·60
85	75	1,739·51	5,584·24
86	76	1,255·89	3,844·73
87	77	886·301	2,588·843
88	78	610·516	1,702·542
89	79	409·880	1,092·026
90	80	267·790	682·146
91	81	169·991	414·356
92	82	104·674	244·365
93	83	62·4177	139·6913
94	84	35·9814	77·2736
95	85	20·0159	41·2922
96	86	10·7252	21·2763
97	87	5·5252	10·5511
98	88	2·7313	5·0259
99	89	1·2930	2·2946
100	90	·5850	1·0016
101	91	·2524	·4166
102	92	·1037	·1642
103	93	·0404	·0605
104	94	·0149	·0201
105	95	·0052	·0052

Difference of Age 97 Years.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
97	0	684·463	1,523·544
98	1	369·553	839·081
99	2	210·625	469·528
100	3	120·056	258·903
101	4	67·2511	138·8466
102	5	36·7958	71·5955
103	6	19·5981	34·7997
104	7	10·1312	15·2016
105	8	5·0704	5·0704

JOINT LIVES :—Two Females.

Difference of Age 11 Years.

Difference of Age 96 Years.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Difference of Age 11 Years.**	
11	0	1,441,825	23,674,493
12	1	1,204,767	22,232,668
13	2	1,091,650	21,027,901
14	3	1,017,167	19,936,251
15	4	958,624	18,919,084
16	5	909,174	17,960,460
17	6	865,749	17,051,286
18	7	826,214	16,185,537
19	8	789,157	15,359,323
20	9	754,305	14,570,166
21	10	721,258	13,815,861
22	11	690,035	13,094,603
23	12	660,351	12,404,568
24	13	631,968	11,744,217
25	14	604,703	11,112,249
26	15	578,406	10,507,546
27	16	552,968	9,929,140
28	17	528,307	9,376,172
29	18	504,367	8,847,865
30	19	481,113	8,343,498
31	20	458,527	7,862,385
32	21	436,609	7,403,858
33	22	415,562	6,967,249
34	23	395,364	6,551,687
35	24	375,990	6,156,323
36	25	357,416	5,780,333
37	26	339,617	5,422,917
38	27	322,566	5,083,300
39	28	306,239	4,760,734
40	29	290,609	4,454,495
41	30	275,651	4,163,886
42	31	261,342	3,888,235
43	32	247,655	3,626,893
44	33	234,567	3,379,238
45	34	222,055	3,144,671
46	35	210,096	2,922,616
47	36	198,668	2,712,520
48	37	187,750	2,513,852
49	38	177,321	2,326,102
50	39	167,362	2,148,781
51	40	157,854	1,981,419
52	41	148,778	1,823,565
53	42	140,118	1,674,787
54	43	131,856	1,534,669
55	44	123,788	1,402,813
56	45	116,022	1,279,025
57	46	108,554	1,163,003
58	47	101,382	1,054,449
59	48	94,497·3	953,066·8
60	49	87,893·9	858,569·5
61	50	81,564·2	770,675·6
62	51	75,500·6	689,111·4
63	52	69,696·4	613,610·8
64	53	64,145·4	543,914·4
65	54	58,842·6	479,769·0
66	55	53,701·9	420,926·4
67	56	48,779·9	367,224·5
68	57	44,083·3	318,444·6
69	58	39,618·1	274,361·3
70	59	35,390·4	234,743·2
71	60	31,405·8	199,352·8
72	61	27,669·9	167,947·0
73	62	24,187·9	140,277·1
74	63	20,964·2	116,089·2
75	64	18,001·9	95,125·0
76	65	15,303·0	77,123·1
77	66	12,867·1	61,820·1
78	67	10,691·5	48,953·0
79	68	8,770·86	38,261·46
80	69	7,096·63	29,490·60
81	70	5,657·35	22,393·97
82	71	4,438·61	16,736·62
83	72	3,423·36	12,298·01
84	73	2,592·44	8,874·65
85	74	1,925·17	6,282·21
86	75	1,400·13	4,357·04
87	76	995·914	2,956·911
88	77	691·856	1,960·997
89	78	468·726	1,269·141
90	79	309·228	800·415
91	80	198·344	491·187
92	81	123·494	292·843
93	82	74·5132	169·3488
94	83	43·4956	94·8356
95	84	24·5198	51·3400
96	85	13·3249	26·8202
97	86	6·9675	13·4953
98	87	3·4989	6·5278
99	88	1·6841	3·0289
100	89	·7754	1·3448
101	90	·3408	·5694
102	91	·1427	·2286
103	92	·0568	·0859
104	93	·0214	·0291
105	94	·0077	·0077

Difference of Age 96 Years.

x	y	$D_{x,y}$	$N_{x,y}$
96	0	1,053·60	2,429·20
97	1	583·568	1,375·604
98	2	341·585	792·036
99	3	200·192	450·451
100	4	115·435	250·259
101	5	65·0928	134·8238
102	6	35·7746	69·7310
103	7	19·1068	33·9564
104	8	9·8920	14·8496
105	9	4·9576	4·9576

JOINT LIVES :—Two Females.

Difference of Age 12 Years.

Difference of Age 95 Years.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Difference of Age 12 Years.**	
12	0	1,413,062	23,071,168
13	1	1,181,030	21,658,106
14	2	1,070,176	20,477,076
15	3	997,002	19,406,900
16	4	939,320	18,409,898
17	5	890,463	17,470,578
18	6	847,458	16,580,115
19	7	808,244	15,732,657
20	8	771,464	14,924,413
21	9	736,873	14,152,949
22	10	704,431	13,416,076
23	11	673,792	12,711,645
24	12	644,670	12,037,853
25	13	616,836	11,393,183
26	14	590,105	10,776,347
27	15	564,332	10,186,242
28	16	539,408	9,621,910
29	17	515,253	9,082,502
30	18	491,809	8,567,249
31	19	469,043	8,075,440
32	20	446,937	7,606,397
33	21	425,488	7,159,460
34	22	404,895	6,733,972
35	23	385,136	6,329,077
36	24	366,185	5,943,941
37	25	348,018	5,577,756
38	26	330,611	5,229,738
39	27	313,937	4,899,127
40	28	297,972	4,585,190
41	29	282,690	4,287,218
42	30	268,066	4,004,528
43	31	254,077	3,736,462
44	32	240,698	3,482,385
45	33	227,905	3,241,687
46	34	215,676	3,013,782
47	35	203,988	2,798,106
48	36	192,820	2,594,118
49	37	182,152	2,401,298
50	38	171,963	2,219,146
51	39	162,234	2,047,183
52	40	152,946	1,884,949
53	41	144,083	1,732,003
54	42	135,626	1,587,920
55	43	127,366	1,452,294
56	44	119,413	1,324,928
57	45	111,765	1,205,515
58	46	104,417	1,093,750
59	47	97,363·2	989,332·5
60	48	90,595·2	891,969·3
61	49	84,105·8	801,374·1
62	50	77,887·4	717,268·3
63	51	71,932·9	639,380·9
64	52	66,235·9	567,448·0
65	53	60,791·4	501,212·1
66	54	55,595·1	440,420·7
67	55	50,567·1	384,825·6
68	56	45,762·1	334,258·5
69	57	41,187·8	288,496·4
70	58	36,851·1	247,308·6
71	59	32,758·5	210,457·5
72	60	28,916·2	177,699·0
73	61	25,329·7	148,782·8
74	62	22,003·9	123,453·1
75	63	18,942·4	101,449·2
76	64	16,147·3	82,506·8
77	65	13,618·7	66,359·5
78	66	11,354·3	52,740·8
79	67	9,349·26	41,386·48
80	68	7,595·52	32,037·22
81	69	6,082·15	24,441·70
82	70	4,795·22	18,359·55
83	71	3,718·11	13,564·33
84	72	2,831·95	9,846·22
85	73	2,116·25	7,014·27
86	74	1,549·57	4,898·02
87	75	1,110·30	3,348·45
88	76	777·421	2,238·147
89	77	531·175	1,460·726
90	78	353·624	929·551
91	79	229·037	575·927
92	80	144·092	346·890
93	81	87·9100	202·7979
94	82	51·9243	114·8879
95	83	29·6404	62·9636
96	84	16·3232	33·3232
97	85	8·6564	17·0000
98	86	4·4123	8·3436
99	87	2·1575	3·9313
100	88	1·0100	1·7738
101	89	·4518	·7638
102	90	·1927	·3120
103	91	·0782	·1193
104	92	·0301	·0411
105	93	·0110	·0110

Difference of Age 95 Years.

x	y	$D_{x,y}$	$N_{x,y}$
95	0	1,582·66	3,780·58
96	1	898·293	2,197·922
97	2	539·404	1,299·629
98	3	324·665	760·225
99	4	192·486	435·560
100	5	111·730	243·074
101	6	63·2862	131·3440
102	7	34·8778	68·0578
103	8	18·6556	33·1800
104	9	9·6719	14·5244
105	10	4·8525	4·8525

JOINT LIVES :—Two Females.

Difference of Age 13 Years.

Difference of Age 94 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	Difference of Age 13 Years.	
13	0	1,385,221	22,475,826
14	1	1,157,798	21,090,605
15	2	1,048,960	19,932,807
16	3	976,925	18,883,847
17	4	919,988	17,906,922
18	5	871,650	16,986,934
19	6	829,027	16,115,284
20	7	790,124	15,286,257
21	8	753,636	14,496,133
22	9	719,683	13,742,497
23	10	687,849	13,022,814
24	11	657,792	12,334,965
25	12	629,234	11,677,173
26	13	601,945	11,047,939
27	14	575,746	10,445,994
28	15	550,494	9,870,248
29	16	526,080	9,319,754
30	17	502,424	8,793,674
31	18	479,471	8,291,250
32	19	457,187	7,811,779
33	20	435,554	7,354,592
34	21	414,567	6,919,038
35	22	394,420	6,504,471
36	23	375,092	6,110,051
37	24	356,556	5,734,959
38	25	338,789	5,378,403
39	26	321,766	5,039,614
40	27	305,462	4,717,848
41	28	289,852	4,412,386
42	29	274,911	4,122,534
43	30	260,615	3,847,623
44	31	246,940	3,587,008
45	32	233,861	3,340,068
46	33	221,357	3,106,207
47	34	209,405	2,884,850
48	35	197,984	2,675,445
49	36	187,071	2,477,461
50	37	176,647	2,290,390
51	38	166,693	2,113,743
52	39	157,190	1,947,050
53	40	148,119	1,789,860
54	41	139,464	1,641,741
55	42	131,008	1,502,277
56	43	122,865	1,371,269
57	44	115,032	1,248,404
58	45	107,506	1,133,372
59	46	100,279	1,025,866
60	47	93,342·8	925,586·7
61	48	86,690·7	832,243·9
62	49	80,314·5	745,553·2
63	50	74,206·9	665,238·7
64	51	68,361·4	591,031·8
65	52	62,772·6	522,670·4
66	53	57,436·3	459,897·8
67	54	52,349·8	402,461·5
68	55	47,438·7	350,111·7
69	56	42,756·4	302,673·0
70	57	38,311·1	259,916·6
71	58	34,110·6	221,605·5
72	59	30,161·6	187,494·9
73	60	26,470·6	157,333·3
74	61	23,042·7	130,862·7
75	62	19,881·9	107,820·0
76	63	16,990·9	87,938·1
77	64	14,370·1	70,947·2
78	65	12,017·6	56,577·1
79	66	9,928·85	44,559·49
80	67	8,096·41	34,630·64
81	68	6,509·72	26,534·23
82	69	5,155·28	20,024·51
83	70	4,016·83	14,869·23
84	71	3,075·78	10,852·40
85	72	2,311·77	7,776·62
86	73	1,703·37	5,464·85
87	74	1,228·80	3,761·48
88	75	866·713	2,532·683
89	76	596·868	1,665·970
90	77	400·738	1,069·102
91	78	261·919	668·364
92	79	166·389	406·445
93	80	102·573	240·056
94	81	61·2598	137·4828
95	82	35·3842	76·2230
96	83	19·7320	40·8388
97	84	10·6042	21·1068
98	85	5·4818	10·5026
99	86	2·7207	5·0208
100	87	1·2939	2·3001
101	88	·5884	1·0062
102	89	·2554	·4178
103	90	·1055	·1624
104	91	·0415	·0569
105	92	·0154	·0154

Difference of Age 94 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	Difference of Age 94 Years.	
94	0	2,322·47	5,750·16
95	1	1,349·37	3,427·69
96	2	830·311	2,078·317
97	3	512·685	1,248·006
98	4	312·168	735·321
99	5	186·308	423·153
100	6	108·630	236·845
101	7	61·6998	128·2149
102	8	34·0541	66·5151
103	9	18·2406	32·4610
104	10	9·4670	14·2204
105	11	4·7534	4·7534

JOINT LIVES :—Two Females.

Difference of Age 14 Years.

Difference of Age 93 Years.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Difference of Age 14 Years.**	
14	0	1,357,973	21,887,863
15	1	1,134,845	20,529,890
16	2	1,027,837	19,395,045
17	3	956,819	18,367,208
18	4	900,551	17,410,389
19	5	852,692	16,509,838
20	6	810,440	15,657,146
21	7	771,865	14,846,706
22	8	736,055	14,074,841
23	9	702,741	13,338,786
24	10	671,515	12,636,045
25	11	642,042	11,964,530
26	12	614,044	11,322,488
27	13	587,299	10,708,444
28	14	561,628	10,121,145
29	15	536,891	9,559,517
30	16	512,982	9,022,626
31	17	489,820	8,509,644
32	18	467,352	8,019,824
33	19	445,542	7,552,472
34	20	424,374	7,106,930
35	21	403,842	6,682,556
36	22	384,134	6,278,714
37	23	365,229	5,894,580
38	24	347,100	5,529,351
39	25	329,726	5,182,251
40	26	313,080	4,852,525
41	27	297,138	4,539,445
42	28	281,876	4,242,307
43	29	267,269	3,960,431
44	30	253,294	3,693,162
45	31	239,926	3,439,868
46	32	227,143	3,199,942
47	33	214,922	2,972,799
48	34	203,242	2,757,877
49	35	192,080	2,554,635
50	36	181,418	2,362,555
51	37	171,234	2,181,137
52	38	161,510	2,009,903
53	39	152,228	1,848,393
54	40	143,371	1,696,165
55	41	134,715	1,552,794
56	42	126,378	1,418,079
57	43	118,357	1,291,701
58	44	110,648	1,173,344
59	45	103,245	1,062,696
60	46	96,137·7	959,450·7
61	47	89,319·9	863,313·0
62	48	82,782·9	773,993·1
63	49	76,519·3	691,210·2
64	50	70,522·5	614,690·9
65	51	64,786·9	544,168·4
66	52	59,308·2	479,381·5
67	53	54,083·5	420,073·3
68	54	49,111·1	365,989·8
69	55	44,322·8	316,878·7
70	56	39,770·1	272,555·9
71	57	35,462·0	232,785·8
72	58	31,406·5	197,323·8
73	59	27,610·7	165,917·3
74	60	24,080·5	138,306·6
75	61	20,820·5	114,226·1
76	62	17,833·6	93,405·6
77	63	15,120·8	75,572·0
78	64	12,680·6	60,451·2
79	65	10,508·8	47,770·6
80	66	8,598·34	37,261·81
81	67	6,939·01	28,663·47
82	68	5,517·69	21,724·46
83	69	4,318·44	16,206·77
84	70	3,322·89	11,888·33
85	71	2,510·81	8,565·44
86	72	1,860·75	6,054·63
87	73	1,350·77	4,193·88
88	74	959·217	2,843·106
89	75	665·423	1,883·889
90	76	450·300	1,218·466
91	77	296·815	768·166
92	78	190·277	471·351
93	79	118·445	281·074
94	80	71·4777	162·6286
95	81	41·7459	91·1509
96	82	23·5558	49·4050
97	83	12·8187	25·8492
98	84	6·7153	13·0305
99	85	3·3801	6·3152
100	86	1·6316	2·9351
101	87	·7538	1·3035
102	88	·3326	·5497
103	89	·1399	·2171
104	90	·0560	·0772
105	91	·0212	·0212

Difference of Age 93 Years.

x	y	$D_{x,y}$	$N_{x,y}$
93	0	3,332·82	8,556·84
94	1	1,980·12	5,224·02
95	2	1,247·25	3,243·90
96	3	789·182	1,996·649
97	4	492·950	1,207·467
98	5	302·149	714·517
99	6	181·137	412·368
100	7	105·906	231·231
101	8	60·2426	125·3253
102	9	33·2966	65·0827
103	10	17·8541	31·7861
104	11	9·2735	13·9320
105	12	4·6585	4·6585

JOINT LIVES:—TWO FEMALES.

Difference of Age 15 Years.

Difference of Age 92 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 15 Years.**	
15	0	1,331,052	21,306,955
16	1	1,111,993	19,975,903
17	2	1,006,683	18,863,910
18	3	936,604	17,857,227
19	4	880,964	16,920,623
20	5	833,575	16,039,659
21	6	791,712	15,206,084
22	7	753,858	14,414,372
23	8	718,728	13,660,514
24	9	686,054	12,941,786
25	10	655,436	12,255,732
26	11	626,542	11,600,296
27	12	599,103	10,973,754
28	13	572,897	10,374,651
29	14	547,750	9,801,754
30	15	523,524	9,254,004
31	16	500,113	8,730,480
32	17	477,439	8,230,367
33	18	455,448	7,752,928
34	19	434,106	7,297,480
35	20	413,395	6,863,374
36	21	393,310	6,449,979
37	22	374,033	6,056,669
38	23	355,543	5,682,636
39	24	337,815	5,327,093
40	25	320,825	4,989,278
41	26	304,549	4,668,453
42	27	288,962	4,363,904
43	28	274,041	4,074,942
44	29	259,761	3,800,901
45	30	246,100	3,541,140
46	31	233,033	3,295,040
47	32	220,539	3,062,007
48	33	208,596	2,841,468
49	34	197,181	2,632,872
50	35	186,276	2,435,691
51	36	175,858	2,249,415
52	37	165,910	2,073,557
53	38	156,413	1,907,647
54	39	147,348	1,751,234
55	40	138,488	1,603,886
56	41	129,954	1,465,398
57	42	121,741	1,335,444
58	43	113,847	1,213,703
59	44	106,263	1,099,856
60	45	98,981·3	993,593·2
61	46	91,994·4	894,611·9
62	47	85,293·5	802,617·5
63	48	78,871·0	717,324·0
64	49	72,720·1	638,453·0
65	50	66,835·0	565,732·9
66	51	61,211·4	498,897·9
67	52	55,846·1	437,686·5
68	53	50,737·6	381,840·4
69	54	45,885·4	331,102·8
70	55	41,227·2	285,217·4
71	56	36,812·5	243,990·2
72	57	32,650·9	207,177·7
73	58	28,750·3	174,526·8
74	59	25,117·7	145,776·5
75	60	21,758·2	120,658·8
76	61	18,675·5	98,900·6
77	62	15,870·8	80,225·1
78	63	13,343·1	64,354·3
79	64	11,088·6	51,011·2
80	65	9,100·59	39,922·56
81	66	7,369·18	30,821·97
82	67	5,881·56	23,452·79
83	68	4,622·02	17,571·23
84	69	3,572·40	12,949·21
85	70	2,712·53	9,376·81
86	71	2,020·95	6,664·28
87	72	1,475·56	4,643·33
88	73	1,054·42	3,167·77
89	74	736·443	2,113·353
90	75	502·019	1,376·910
91	76	333·524	874·891
92	77	215·628	541·367
93	78	135·451	325·739
94	79	82·5383	190·2882
95	80	48·7090	107·7499
96	81	27·7909	59·0409
97	82	15·3028	31·2500
98	83	8·1176	15·9472
99	84	4·1407	7·8296
100	85	2·0271	3·6889
101	86	·9506	1·6618
102	87	·4261	·7112
103	88	·1822	·2851
104	89	·0742	·1029
105	90	·0287	0287
		Difference of Age 92 Years.	
92	0	4,681·86	12,471·47
93	1	2,841·54	7,789·61
94	2	1,830·26	4,948·07
95	3	1,185·47	3,117·81
96	4	758·804	1,932·338
97	5	477·130	1,173·534
98	6	293·764	696·404
99	7	176·597	402·640
100	8	103·405	226·043
101	9	58·9027	122·6382
102	10	32·5910	63·7355
103	11	17·4892	31·1445
104	12	9·0885	13·6553
105	13	4·5668	4·5668

JOINT LIVES:—TWO FEMALES.

Difference of Age 16 Years.

Difference of Age 91 Years.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	**Difference of Age 16 Years.**	
16	0	1,304,248	20,733,006
17	1	1,089,107	19,428,758
18	2	985,415	18,339,651
19	3	916,233	17,354,236
20	4	861,214	16,438,003
21	5	814,312	15,576,789
22	6	773,242	14,762,477
23	7	736,112	13,989,235
24	8	701,661	13,253,123
25	9	669,627	12,551,462
26	10	639,614	11,881,835
27	11	611,297	11,242,221
28	12	584,412	10,630,924
29	13	558,741	10,046,512
30	14	534,113	9,487,771
31	15	510,391	8,953,658
32	16	487,471	8,443,267
33	17	465,278	7,955,796
34	18	443,757	7,490,518
35	19	422,875	7,046,761
36	20	402,614	6,623,886
37	21	382,967	6,221,272
38	22	364,114	5,838,305
39	23	346,031	5,474,191
40	24	328,695	5,128,160
41	25	312,082	4,799,465
42	26	296,168	4,487,383
43	27	280,930	4,191,215
44	28	266,343	3,910,285
45	29	252,384	3,643,942
46	30	239,030	3,391,558
47	31	226,258	3,152,528
48	32	214,048	2,926,270
49	33	202,376	2,712,222
50	34	191,223	2,509,846
51	35	180,567	2,318,623
52	36	170,391	2,138,056
53	37	160,674	1,967,665
54	38	151,399	1,806,991
55	39	142,331	1,655,592
56	40	133,594	1,513,261
57	41	125,186	1,379,667
58	42	117,102	1,254,481
59	43	109,334	1,137,379
60	44	101,875	1,028,045
61	45	94,715·4	926,170·2
62	46	87,847·4	831,454·8
63	47	81,263·0	743,607·4
64	48	74,955·0	662,344·4
65	49	68,917·7	587,389·4
66	50	63,146·4	518,471·7
67	31	57,638·2	455,325·3
68	52	52,391·2	397,687·1
69	53	47,405·1	345,295·9
70	54	42,680·6	297,890·8
71	55	38,161·2	255,210·2
72	56	33,894·3	217,049·0
73	57	29,889·4	183,154·7
74	58	26,154·4	153,265·3
75	59	22,695·4	127,110·9
76	60	19,516·6	104,415·5
77	61	16,620·0	84,898·9
78	62	14,004·9	68,278·9
79	63	11,668·0	54,274·0
80	64	9,602·69	42,605·97
81	65	7,799·64	33,003·28
82	66	6,246·17	25,203·64
83	67	4,926·82	18,957·47
84	68	3,823·53	14,030·65
85	69	2,916·21	10,207·12
86	70	2,183·32	7,290·91
87	71	1,602·61	5,107·59
88	72	1,151·84	3,504·98
89	73	809·538	2,353·143
90	74	555·600	1,543·605
91	75	371·831	988·005
92	76	242·296	616·174
93	77	153·497	373·878
94	78	94·3883	220·3807
95	79	56·2464	125·9924
96	80	32·4263	69·7460
97	81	18·0541	37·3197
98	82	9·6907	19·2656
99	83	5·0054	9·5749
100	84	2·4832	4·5695
101	85	1·1810	2·0863
102	86	·5373	·9053
103	87	·2334	·3680
104	88	·0966	·1346
105	89	·0380	·0380

x	y	**Difference of Age 91 Years.**	
91	0	6,444·65	17,820·68
92	1	3,991·72	11,376·03
93	2	2,626·50	7,384·31
94	3	1,739·60	4,757·81
95	4	1,139·83	3,018·21
96	5	734·452	1,878·377
97	6	463·888	1,143·925
98	7	286·400	680·037
99	8	172·426	393·637
100	9	101·105	221·211
101	10	57·6544	120·1061
102	11	31·9250	62·4517
103	12	17·1403	30·5267
104	13	8·9095	13·3864
105	14	4·4769	4·4769

JOINT LIVES:—Two Females.

Difference of Age 17 Years.

Difference of Age 90 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 17 Years.**	
17	0	1,277,405	20,166,102
18	1	1,066,097	18,888,697
19	2	963,983	17,822,600
20	3	895,692	16,858,617
21	4	841,312	15,962,925
22	5	795,315	15,121,613
23	6	755,040	14,326,298
24	7	718,633	13,571,258
25	8	684,860	12,852,625
26	9	653,462	12,167,765
27	10	624,050	11,514,303
28	11	596,307	10,890,253
29	12	569,971	10,293,946
30	13	544,830	9,723,975
31	14	520,714	9,179,145
32	15	497,489	8,658,431
33	16	475,055	8,160,942
34	17	453,335	7,685,887
35	18	432,277	7,232,552
36	19	411,847	6,800,275
37	20	392,027	6,388,428
38	21	372,812	5,996,401
39	22	354,374	5,623,589
40	23	336,690	5,269,215
41	24	319,739	4,932,525
42	25	303,495	4,612,786
43	26	287,936	4,309,291
44	27	273,038	4,021,355
45	28	258,778	3,748,317
46	29	245,133	3,489,539
47	30	232,081	3,244,406
48	31	219,599	3,012,325
49	32	207,665	2,792,726
50	33	196,260	2,585,061
51	34	185,363	2,388,801
52	35	174,953	2,203,438
53	36	165,013	2,028,485
54	37	155,523	1,863,472
55	38	146,243	1,707,949
56	39	137,300	1,561,706
57	40	128,693	1,424,406
58	41	120,415	1,295,713
59	42	112,460	1,175,298
60	43	104,819	1,062,838
61	44	97,484·1	958,019·0
62	45	90,445·8	860,534·9
63	46	83,696·3	770,089·1
64	47	77,228·2	686,392·8
65	48	71,035·8	609,164·6
66	49	65,114·2	538,128·8
67	50	59,460·3	473,014·6
68	51	54,072·3	413,554·3
69	52	48,950·0	359,482·0
70	53	44,094·2	310,532·0
71	54	39,506·6	266,437·8
72	55	35,136·1	226,931·2
73	56	31,027·7	191,795·1
74	57	27,190·6	160,767·4
75	58	23,632·1	133,576·8
76	59	20,357·2	109,944·7
77	60	17,368·6	89,587·5
78	61	14,666·0	72,218·9
79	62	12,246·7	57,552·9
80	63	10,104·4	45,306·2
81	64	8,229·96	35,201·76
82	65	6,611·03	26,971·80
83	66	5,232·25	20,360·77
84	67	4,075·68	15,128·52
85	68	3,121·22	11,052·84
86	69	2,347·26	7,931·62
87	70	1,731·36	5,584·36
88	71	1,251·01	3,853·00
89	72	884·331	2,601·987
90	73	610·745	1,717·656
91	74	411·517	1,106·911
92	75	270·126	695·394
93	76	172·481	425·268
94	77	106·964	252·787
95	78	64·3216	145·8233
96	79	37·4440	81·5017
97	80	21·0655	44·0577
98	81	11·4330	22·9922
99	82	5·9754	11·5592
100	83	3·0018	5·5838
101	84	1·4467	2·5820
102	85	·6676	1·1353
103	86	·2944	·4677
104	87	·1238	·1733
105	88	·0495	·0495
		Difference of Age 90 Years.	
90	0	8,701·08	24,988·87
91	1	5,494·66	16,287·79
92	2	3,689·63	10,793·13
93	3	2,496·40	7,103·50
94	4	1,672·64	4,607·10
95	5	1,103·25	2,934·46
96	6	714·068	1,831·206
97	7	452·259	1,117·138
98	8	279·636	664·879
99	9	168·591	385·243
100	10	98·9626	216·6519
101	11	56·4762	117·6893
102	12	31·2881	61·2131
103	13	16·8026	29·9250
104	14	8·7342	13·1224
105	15	4·3882	4·3882

JOINT LIVES:—Two Females.

Difference of Age 18 Years.

Difference of Age 89 Years.

Difference of Age 18 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
18	0	1,250,417	19,606,474
19	1	1,042,910	18,356,057
20	2	942,371	17,313,147
21	3	874,993	16,370,776
22	4	821,685	15,495,783
23	5	776,593	14,674,098
24	6	737,111	13,897,505
25	7	701,425	13,160,394
26	8	668,327	12,458,969
27	9	637,561	11,790,642
28	10	608,748	11,153,081
29	11	581,573	10,544,333
30	12	555,780	9,962,760
31	13	531,162	9,406,980
32	14	507,551	8,875,818
33	15	484,818	8,368,267
34	16	462,861	7,883,449
35	17	441,607	7,420,588
36	18	421,004	6,978,981
37	19	401,017	6,557,977
38	20	381,631	6,156,960
39	21	362,838	5,775,329
40	22	344,807	5,412,491
41	23	327,516	5,067,684
42	24	310,940	4,740,168
43	25	295,059	4,429,228
44	26	279,847	4,134,169
45	27	265,283	3,854,322
46	28	251,344	3,589,039
47	29	238,006	3,337,695
48	30	225,249	3,099,689
49	31	213,051	2,874,440
50	32	201,390	2,661,389
51	33	190,246	2,459,999
52	34	179,600	2,269,753
53	35	169,431	2,090,153
54	36	159,723	1,920,722
55	37	150,227	1,760,999
56	38	141,074	1,610,772
57	39	132,263	1,469,698
58	40	123,788	1,337,435
59	41	115,642	1,213,647
60	42	107,816	1,098,005
61	43	100,302	990,189
62	44	93,089·7	889,887·1
63	45	86,171·8	796,797·4
64	46	79,540·7	710,625·6
65	47	73,190·1	631,084·9
66	48	67,115·4	557,894·8
67	49	61,313·1	490,779·4
68	50	55,781·7	429,466·3
69	51	50,520·8	373,684·6
70	52	45,531·2	323,163·8
71	53	40,815·0	277,632·6
72	54	36,374·8	236,817·6
73	55	32,164·4	200,442·8
74	56	28,226·1	168,278·4
75	57	24,568·4	140,052·3
76	58	21,197·5	115,483·9
77	59	18,116·7	94,286·4
78	60	15,326·6	76,169·7
79	61	12,824·8	60,843·1
80	62	10,605·5	48,018·3
81	63	8,659·93	37,412·76
82	64	6,975·78	28,752·83
83	65	5,537·89	21,777·05
84	66	4,328·34	16,239·16
85	67	3,327·05	11,910·82
86	68	2,512·27	8,583·77
87	69	1,861·37	6,071·50
88	70	1,351·52	4,210·13
89	71	960·470	2,858·605
90	72	667·172	1,898·135
91	73	452·362	1,230·963
92	74	298·956	778·601
93	75	192·291	479·645
94	76	120·193	287·354
95	77	72·8913	167·1613
96	78	42·8198	94·2700
97	79	24·3252	51·4502
98	80	13·3400	27·1250
99	81	7·0497	13·7850
100	82	3·5835	6·7353
101	83	1·7488	3·1518
102	84	·8178	1·4030
103	85	·3657	·5852
104	86	·1561	·2195
105	87	·0634	·0634

Difference of Age 89 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
89	0	11,533·2	34,417·8
90	1	7,418·49	22,884·56
91	2	5,078·83	15,466·07
92	3	3,506·87	10,387·24
93	4	2,400·30	6,880·37
94	5	1,618·96	4,480·07
95	6	1,072·63	2,861·11
96	7	696·168	1,788·475
97	8	441·579	1,092·307
98	9	273·416	650·728
99	10	165·018	377·312
100	11	96·9402	212·2942
101	12	55·3495	115·3540
102	13	30·6716	60·0045
103	14	16·4721	29·3329
104	15	8·5610	12·8608
105	16	4·2998	4·2998

JOINT LIVES:—Two Females.

Difference of Age 19 Years.

Difference of Age 88 Years.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	Difference of Age 19 Years.	
19	0	1,223,221	19,054,481
20	1	1,019,529	17,831,260
21	2	920,593	16,811,731
22	3	854,581	15,891,138
23	4	802,343	15,036,557
24	5	758,152	14,234,214
25	6	719,461	13,476,062
26	7	684,492	12,756,601
27	8	652,065	12,072,109
28	9	621,928	11,420,044
29	10	593,706	10,798,116
30	11	567,093	10,204,410
31	12	541,837	9,637,317
32	13	517,736	9,095,480
33	14	494,624	8,577,744
34	15	472,374	8,083,120
35	16	450,387	7,610,746
36	17	430,090	7,159,859
37	18	409,933	6,729,769
38	19	390,383	6,319,836
39	20	371,421	5,929,453
40	21	353,043	5,558,032
41	22	335,411	5,204,989
42	23	318,503	4,869,578
43	24	302,297	4,551,075
44	25	286,770	4,248,778
45	26	271,899	3,962,008
46	27	257,662	3,690,109
47	28	244,036	3,432,447
48	29	231,001	3,188,411
49	30	218,533	2,957,410
50	31	206,612	2,738,877
51	32	195,218	2,532,265
52	33	184,331	2,337,047
53	34	173,931	2,152,716
54	35	164,000	1,978,785
55	36	154,284	1,814,785
56	37	144,918	1,660,501
57	38	135,899	1,515,583
58	39	127,223	1,379,684
59	40	118,882	1,252,461
60	41	110,867	1,133,579
61	42	103,170	1,022,712
62	43	95,780·4	919,541·5
63	44	88,690·8	823,761·1
64	45	81,893·3	735,070·3
65	46	75,381·7	653,177·0
66	47	69,150·8	577,795·3
67	48	63,197·5	508,644·5
68	49	57,520·0	445,447·0
69	50	52,117·9	387,927·0
70	51	46,992·2	335,809·1
71	52	42,145·2	288,816·9
72	53	37,579·5	246,671·7
73	54	33,298·4	209,092·2
74	55	29,260·2	175,793·8
75	56	25,504·1	146,533·6
76	57	22,037·3	121,029·5
77	58	18,864·4	98,992·2
78	59	15,986·7	80,127·8
79	60	13,402·4	64,141·1
80	61	11,106·2	50,738·7
81	62	9,089·45	39,632·49
82	63	7,340·23	30,543·04
83	64	5,843·43	23,202·81
84	65	4,581·17	17,359·38
85	66	3,533·30	12,778·21
86	67	2,677·94	9,244·91
87	68	1,992·22	6,566·97
88	69	1,453·00	4,574·75
89	70	1,037·64	3,121·75
90	71	724·614	2,084·113
91	72	494·155	1,359·499
92	73	328·629	865·344
93	74	212·814	536·715
94	75	133·997	323·901
95	76	81·9062	189·9043
96	77	48·5248	107·9981
97	78	27·8175	59·4733
98	79	15·4042	31·6558
99	80	8·2256	16·2516
100	81	4·2278	8·0260
101	82	2·0877	3·7982
102	83	·9886	1·7105
103	84	·4480	·7219
104	85	·1939	·2739
105	86	·0800	·0800

Ages		$D_{x,y}$	$N_{x,y}$
x	y	Difference of Age 88 Years.	
88	0	15,022·0	46,603·2
89	1	9,833·14	31,581·20
90	2	6,857·05	21,748·06
91	3	4,827·25	14,891·01
92	4	3,371·88	10,063·76
93	5	2,323·27	6,691·88
94	6	1,574·03	4,368·61
95	7	1,045·75	2,794·58
96	8	679·727	1,748·831
97	9	431·757	1,069·104
98	10	267·622	637·347
99	11	161·646	369·725
100	12	95·0063	208·0790
101	13	54·2590	113·0727
102	14	30·0683	58·8137
103	15	16·1455	28·7454
104	16	8·3886	12·5999
105	17	4·2113	4·2113

JOINT LIVES:—Two Females.

Difference of Age 20 Years.

Difference of Age 87 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
		Difference of Age 20 Years.	
20	0	1,195,797	18,510,539
21	1	995,968	17,314,742
22	2	899,117	16,318,774
23	3	834,464	15,419,657
24	4	783,290	14,585,193
25	5	739,998	13,801,903
26	6	702,093	13,061,905
27	7	667,837	12,359,812
28	8	636,076	11,691,975
29	9	606,560	11,055,899
30	10	578,924	10,449,339
31	11	552,867	9,870,415
32	12	528,141	9,317,548
33	13	504,548	8,789,407
34	14	481,928	8,284,859
35	15	460,153	7,802,931
36	16	439,128	7,342,778
37	17	418,781	6,903,650
38	18	399,062	6,484,869
39	19	379,939	6,085,807
40	20	361,395	5,705,868
41	21	343,423	5,344,473
42	22	326,182	5,001,050
43	23	309,650	4,674,868
44	24	293,805	4,365,218
45	25	278,625	4,071,413
46	26	264,088	3,792,788
47	27	250,171	3,528,700
48	28	236,853	3,278,529
49	29	224,113	3,041,676
50	30	211,929	2,817,563
51	31	200,281	2,605,634
52	32	189,149	2,405,353
53	33	178,513	2,216,204
54	34	168,355	2,037,691
55	35	158,415	1,869,336
56	36	148,831	1,710,921
57	37	139,601	1,562,090
58	38	130,720	1,422,489
59	39	122,180	1,291,769
60	40	113,973	1,169,589
61	41	106,089	1,055,616
62	42	98,518·9	949,527·3
63	43	91,254·3	851,008·4
64	44	84,287·3	759,754·1
65	45	77,611·3	675,466·8
66	46	71,221·4	597,855·5
67	47	65,114·2	526,634·1
68	48	59,287·8	461,519·9
69	49	53,741·9	402,232·1
70	50	48,477·8	348,490·2
71	51	43,497·6	300,012·4
72	52	38,804·2	256,514·8
73	53	34,401·2	217,710·6
74	54	30,291·8	183,309·4
75	55	26,438·5	153,017·6
76	56	22,876·6	126,579·1
77	57	19,611·8	103,702·5
78	58	16,646·5	84,090·7
79	59	13,979·7	67,444·2
80	60	11,606·4	53,464·5
81	61	9,518·53	41,858·11
82	62	7,704·29	32,339·58
83	63	6,148·71	24,635·29
84	64	4,833·93	18,486·58
85	65	3,739·70	13,652·65
86	66	2,843·96	9,912·95
87	67	2,123·60	7,068·99
88	68	1,555·15	4,945·39
89	69	1,115·55	3,390·24
90	70	782·831	2,274·691
91	71	536·701	1,491·860
92	72	358·991	955·159
93	73	233·937	596·168
94	74	148·299	362·231
95	75	91·3136	213·9321
96	76	54·5261	122·6185
97	77	31·5237	68·0924
98	78	17·6158	36·5687
99	79	9·4984	18·9529
100	80	4·9329	9·4545
101	81	2·4630	4·5216
102	82	1·1801	2·0586
103	83	·5416	·8785
104	84	·2375	·3369
105	85	·0994	·0994

Difference of Age 87 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
87	0	19,243·9	62,089·2
88	1	12,807·7	42,845·3
89	2	9,088·97	30,037·64
90	3	6,517·40	20,948·67
91	4	4,641·44	14,431·27
92	5	3,263·67	9,789·83
93	6	2,258·79	6,526·16
94	7	1,534·57	4,267·37
95	8	1,021·05	2,732·80
96	9	664·608	1,711·746
97	10	422·607	1,047·138
98	11	262·153	624·531
99	12	158·421	362·378
100	13	93·1344	203·9570
101	14	53·1917	110·8226
102	15	29·4722	57·6309
103	16	15·8204	28·1587
104	17	8·2160	12·3383
105	18	4·1223	4·1223

JOINT LIVES:—Two Females.

Difference of Age 21 Years.

Difference of Age 86 Years.

Ages		$D_{x,y}$	$N_{x,y}$
x	y	Difference of Age 21 Years.	
21	0	1,168,163	17,975,143
22	1	972,733	16,806,980
23	2	877,952	15,834,247
24	3	814,649	14,956,295
25	4	764,535	14,141,646
26	5	722,134	13,377,111
27	6	685,009	12,654,977
28	7	651,461	11,969,968
29	8	620,359	11,318,507
30	9	591,458	10,698,148
31	10	564,401	10,106,690
32	11	538,892	9,542,289
33	12	514,689	9,003,397
34	13	491,598	8,488,708
35	14	469,460	7,997,110
36	15	448,153	7,527,650
37	16	427,581	7,079,497
38	17	407,675	6,651,916
39	18	388,387	6,244,241
40	19	369,683	5,855,854
41	20	351,547	5,486,171
42	21	333,973	5,134,624
43	22	317,115	4,800,651
44	23	300,951	4,483,536
45	24	285,460	4,182,585
46	25	270,621	3,897,125
47	26	256,410	3,626,504
48	27	242,807	3,370,094
49	28	229,791	3,127,287
50	29	217,340	2,897,496
51	30	205,434	2,680,156
52	31	194,054	2,474,722
53	32	183,179	2,280,668
54	33	172,791	2,097,489
55	34	162,622	1,924,698
56	35	152,816	1,762,076
57	36	143,371	1,609,260
58	37	134,281	1,465,889
59	38	125,538	1,331,608
60	39	117,135	1,206,070
61	40	109,061	1,088,935
62	41	101,307	979,874
63	42	93,863·4	878,566·6
64	43	86,723·5	784,703·2
65	44	79,880·1	697,979·7
66	45	73,328·0	618,099·6
67	46	67,063·9	544,771·6
68	47	61,085·8	477,707·7
69	48	55,393·6	416,621·9
70	49	49,988·5	361,228·3
71	50	44,872·7	311,239·8
72	51	40,049·4	266,367·1
73	52	35,522·3	226,317·7
74	53	31,295·0	190,795·4
75	54	27,370·5	159,500·4
76	55	23,714·7	132,129·9
77	56	20,358·7	108,415·2
78	57	17,306·1	88,056·5
79	58	14,556·7	70,750·4
80	59	12,106·3	56,193·7
81	60	9,947·24	44,087·41
82	61	8,067·98	34,140·17
83	62	6,453·68	26,072·19
84	63	5,086·48	19,618·51
85	64	3,946·02	14,532·03
86	65	3,010·08	10,586·01
87	66	2,255·25	7,575·93
88	67	1,657·70	5,320·68
89	68	1,193·97	3,662·98
90	69	841·612	2,469·014
91	70	579·821	1,627·402
92	71	389·899	1,047·581
93	72	255·551	657·682
94	73	163·018	402·131
95	74	101·059	239·113
96	75	60·7888	138·0541
97	76	35·4224	77·2653
98	77	19·9628	41·8429
99	78	10·8621	21·8801
100	79	5·6963	11·0180
101	80	2·8739	5·3217
102	81	1·3923	2·4478
103	82	·6465	1·0555
104	83	·2872	·4090
105	84	·1218	·1218

Difference of Age 86 Years.

x	y	$D_{x,y}$	$N_{x,y}$
86	0	24,267·4	81,459·3
87	1	16,407·2	57,191·9
88	2	11,838·4	40,784·7
89	3	8,638·76	28,946·30
90	4	6,266·53	20,307·54
91	5	4,492·48	14,041·01
92	6	3,173·09	9,548·53
93	7	2,202·17	6,375·44
94	8	1,498·33	4,173·27
95	9	998·338	2,674·943
96	10	650·524	1,676·605
97	11	413·970	1,026·081
98	12	256·923	612·111
99	13	155·300	355·188
100	14	91·3024	199·8882
101	15	52·1372	108·5858
102	16	28·8787	56·4486
103	17	15·4948	27·5699
104	18	8·0424	12·0751
105	19	4·0327	4·0327

JOINT LIVES:—TWO FEMALES.

Difference of Age 22 Years.

Difference of Age 85 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 22 Years.**	
22	0	1,140,912	17,448,838
23	1	949,835	16,307,926
24	2	857,104	15,358,091
25	3	795,142	14,500,987
26	4	746,078	13,705,845
27	5	704,563	12,959,767
28	6	668,212	12,255,204
29	7	635,364	11,586,992
30	8	604,913	10,951,628
31	9	576,620	10,346,715
32	10	550,134	9,770,095
33	11	525,166	9,219,961
34	12	501,478	8,694,795
35	13	478,880	8,193,317
36	14	457,217	7,714,437
37	15	436,368	7,257,220
38	16	416,242	6,820,852
39	17	396,769	6,404,610
40	18	377,902	6,007,841
41	19	359,609	5,629,939
42	20	341,873	5,270,330
43	21	324,689	4,928,457
44	22	308,207	4,603,768
45	23	292,404	4,295,561
46	24	277,260	4,003,157
47	25	262,753	3,725,897
48	26	248,863	3,463,144
49	27	235,567	3,214,281
50	28	222,847	2,978,714
51	29	210,680	2,755,867
52	30	199,047	2,545,187
53	31	187,929	2,346,140
54	32	177,307	2,158,211
55	33	166,906	1,980,904
56	34	156,875	1,813,998
57	35	147,210	1,657,123
58	36	137,907	1,509,913
59	37	128,958	1,372,006
60	38	120,355	1,243,048
61	39	112,086	1,122,693
62	40	104,144	1,010,607
63	41	96,519·3	906,463·1
64	42	89,203·1	809,943·8
65	43	82,188·9	720,740·7
66	44	75,471·6	638,551·8
67	45	69,047·5	563,080·2
68	46	62,914·9	494,032·7
69	47	57,073·6	431,117·8
70	48	51,524·8	374,044·2
71	49	46,270·9	322,519·4
72	50	41,315·5	276,248·5
73	51	36,662·2	234,933·0
74	52	32,314·9	198,270·8
75	53	28,277·0	165,955·9
76	54	24,550·7	137,678·9
77	55	21,104·6	113,128·2
78	56	17,965·2	92,023·6
79	57	15,133·4	74,058·4
80	58	12,606·0	58,925·0
81	59	10,375·7	46,319·0
82	60	8,431·36	35,943·25
83	61	6,758·33	27,511·89
84	62	5,338·76	20,753·56
85	63	4,152·18	15,414·80
86	64	3,176·16	11,262·62
87	65	2,386·98	8,086·46
88	66	1,760·47	5,699·48
89	67	1,272·71	3,939·01
90	68	900·776	2,666·299
91	69	623·358	1,765·523
92	70	421·224	1,142·165
93	71	277·553	720·941
94	72	178·079	443·388
95	73	111·090	265·309
96	74	67·2767	154·2185
97	75	39·4909	86·9418
98	76	22·4317	47·4509
99	77	12·3093	25·0192
100	78	6·5141	12·7099
101	79	3·3186	6·1958
102	80	1·6245	2·8772
103	81	·7627	1·2527
104	82	·3428	·4900
105	83	·1472	·1472

Difference of Age 85 Years.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
85	0	30,149·5	105,325·4
86	1	20,690·2	75,175·9
87	2	15,165·5	54,485·7
88	3	11,252·0	39,320·2
89	4	8,306·23	28,068·21
90	5	6,065·41	19,761·98
91	6	4,367·80	13,696·57
92	7	3,093·54	9,328·77
93	8	2,150·16	6,235·23
94	9	1,465·00	4,085·07
95	10	977·181	2,620·070
96	11	637·230	1,642·889
97	12	405·712	1,005·659
98	13	251·861	599·947
99	14	152·245	348·086
100	15	89·4924	195·8414
101	16	51·0873	106·3490
102	17	28·2844	55·2617
103	18	15·1675	26·9773
104	19	7·8675	11·8098
105	20	3·9423	3·9423

JOINT LIVES:—Two Females.

Difference of Age 23 Years.

Difference of Age 84 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 23 Years.**	
23	0	1,114,054	16,931,595
24	1	927,281	15,817,541
25	2	836,581	14,890,260
26	3	775,947	14,053,679
27	4	727,925	13,277,732
28	5	687,286	12,549,807
29	6	651,701	11,862,521
30	7	619,544	11,210,820
31	8	589,738	10,591,276
32	9	562,045	10,001,538
33	10	536,122	9,439,493
34	11	511,686	8,903,371
35	12	488,504	8,391,685
36	13	466,391	7,903,181
37	14	445,194	7,436,790
38	15	424,796	6,991,596
39	16	405,107	6,566,800
40	17	386,058	6,161,693
41	18	367,604	5,775,635
42	19	349,714	5,408,031
43	20	332,370	5,058,317
44	21	315,568	4,725,947
45	22	299,453	4,410,379
46	23	284,003	4,110,926
47	24	269,199	3,826,923
48	25	255,019	3,557,724
49	26	241,442	3,302,705
50	27	228,449	3,061,263
51	28	216,018	2,832,814
52	29	204,130	2,616,796
53	30	192,765	2,412,666
54	31	181,905	2,219,901
55	32	171,269	2,037,996
56	33	161,008	1,866,727
57	34	151,120	1,705,719
58	35	141,600	1,554,599
59	36	132,441	1,412,999
60	37	123,633	1,280,558
61	38	115,167	1,156,925
62	39	107,034	1,041,758
63	40	99,223·2	934,723·9
64	41	91,727·1	835,500·7
65	42	84,538·8	743,773·6
66	43	77,653·0	659,234·8
67	44	71,065·9	581,581·8
68	45	64,775·8	510,515·9
69	46	58,782·6	445,740·1
70	47	53,087·4	386,957·5
71	48	47,693·0	333,870·1
72	49	42,602·9	286,177·1
73	50	37,821·2	243,574·2
74	51	33,351·9	205,753·0
75	52	29,198·6	172,401·1
76	53	25,363·8	143,202·5
77	54	21,848·6	117,838·7
78	55	18,623·4	95,990·1
79	56	15,709·7	77,366·7
80	57	13,105·4	61,657·0
81	58	10,803·9	48,551·6
82	59	8,794·50	37,747·65
83	60	7,062·72	28,953·15
84	61	5,590·78	21,890·43
85	62	4,358·12	16,299·65
86	63	3,342·09	11,941·53
87	64	2,518·68	8,599·44
88	65	1,863·30	6,080·76
89	66	1,351·61	4,217·46
90	67	960·178	2,865·851
91	68	667·179	1,905·673
92	69	452·853	1,238·494
93	70	299·852	785·641
94	71	193·412	485·789
95	72	121·354	292·377
96	73	73·9542	171·0227
97	74	43·7057	97·0685
98	75	25·0082	53·3628
99	76	13·8316	28·3546
100	77	7·3820	14·5230
101	78	3·7950	7·1410
102	79	1·8759	3·3460
103	80	·8900	1·4701
104	81	·4044	·5801
105	82	·1757	·1757

Difference of Age 84 Years.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
84	0	36,933·6	134,315·7
85	1	25,705·3	97,382·1
86	2	19,124·4	71,676·8
87	3	14,414·3	52,552·4
88	4	10,818·9	38,138·1
89	5	8,039·66	27,319·19
90	6	5,897·08	19,279·53
91	7	4,258·30	13,382·45
92	8	3,020·49	9,124·15
93	9	2,102·33	6,103·66
94	10	1,433·96	4,001·33
95	11	957·211	2,567·374
96	12	624·517	1,610·163
97	13	397·719	985·646
98	14	246·907	587·927
99	15	149·227	341·020
100	16	87·6903	191·7929
101	17	50·0359	104·1026
102	18	27·6868	54·0667
103	19	14·8376	26·3799
104	20	7·6911	11·5423
105	21	3·8512	3·8512

JOINT LIVES:—Two Females.

Difference of Age 24 Years.

Difference of Age 83 Years.

Difference of Age 24 Years.

Ages x	Ages y	$D_{x, y}$	$N_{x, y}$
24	0	1,087,601	16,423,355
25	1	905,077	15,335,754
26	2	816,385	14,430,677
27	3	757,067	13,614,292
28	4	710,075	12,857,225
29	5	670,304	12,147,150
30	6	635,475	11,476,846
31	7	604,002	10,841,371
32	8	574,831	10,237,369
33	9	547,729	9,662,538
34	10	522,361	9,114,809
35	11	498,448	8,592,448
36	12	475,765	8,094,000
37	13	454,127	7,618,235
38	14	433,388	7,164,108
39	15	413,432	6,730,720
40	16	394,171	6,317,288
41	17	375,538	5,923,117
42	18	357,489	5,547,579
43	19	339,993	5,190,090
44	20	323,033	4,850,097
45	21	306,606	4,527,064
46	22	290,850	4,220,458
47	23	275,747	3,929,608
48	24	261,275	3,653,861
49	25	247,415	3,392,586
50	26	234,146	3,145,171
51	27	221,448	2,911,025
52	28	209,301	2,689,577
53	29	197,687	2,480,276
54	30	186,586	2,282,589
55	31	175,710	2,096,003
56	32	165,216	1,920,293
57	33	155,101	1,755,077
58	34	145,361	1,599,976
59	35	135,987	1,454,615
60	36	126,972	1,318,628
61	37	118,305	1,191,656
62	38	109,976	1,073,351
63	39	101,976	963,375
64	40	94,296·7	861,398·5
65	41	86,930·9	767,101·8
66	42	79,873·2	680,170·9
67	43	73,120·0	600,297·7
68	44	66,669·4	527,177·7
69	45	60,521·2	460,508·3
70	46	54,677·0	399,987·1
71	47	49,139·4	345,310·1
72	48	43,912·3	296,170·7
73	49	38,999·7	252,258·4
74	50	34,406·2	213,258·7
75	51	30,135·5	178,852·5
76	52	26,190·4	148,717·0
77	53	22,572·2	122,526·6
78	54	19,279·9	99,954·4
79	55	16,285·3	80,674·5
80	56	13,604·5	64,389·2
81	57	11,232·0	50,784·7
82	58	9,157·49	39,552·71
83	59	7,366·92	30,395·22
84	60	5,842·59	23,028·30
85	61	4,563·85	17,185·71
86	62	3,507·86	12,621·86
87	63	2,650·27	9,114·00
88	64	1,966·11	6,463·73
89	65	1,430·56	4,497·62
90	66	1,019·70	3,067·06
91	67	711·177	2,047·361
92	68	484·688	1,336·184
93	69	322·367	851·496
94	70	208·951	529·129
95	71	131·802	320·178
96	72	80·7869	188·3759
97	73	48·0437	107·5890
98	74	27·6773	59·5453
99	75	15·4203	31·8680
100	76	8·2949	16·4477
101	77	4·3006	8·1528
102	78	2·1453	3·8522
103	79	1·0277	1·7069
104	80	·4719	·6792
105	81	·2073	·2073

Difference of Age 83 Years.

Ages x	Ages y	$D_{x, y}$	$N_{x, y}$
83	0	44,646·6	169,059·5
84	1	31,489·3	124,412·9
85	2	23,759·9	92,923·6
86	3	18,177·1	69,163·7
87	4	13,859·5	50,986·6
88	5	10,471·7	37,127·1
89	6	7,816·53	26,655·44
90	7	5,749·25	18,838·91
91	8	4,157·74	13,089·66
92	9	2,953·30	8,931·92
93	10	2,057·78	5,978·62
94	11	1,404·65	3,920·84
95	12	938·116	2,516·187
96	13	612·213	1,578·071
97	14	389·895	965·858
98	15	242·012	575·963
99	16	146·222	333·951
100	17	85·8855	187·7285
101	18	48·9788	101·8430
102	19	27·0846	52·8642
103	20	14·5049	25·7796
104	21	7·5134	11·2747
105	22	3·7613	3·7613

JOINT LIVES:—Two Females.

Difference of Age 25 Years.

Difference of Age 82 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	Difference of Age 25 Years.	
25	0	1,061,558	15,924,052
26	1	883,228	14,862,494
27	2	796,521	13,979,266
28	3	738,502	13,182,745
29	4	692,529	12,444,243
30	5	653,615	11,751,714
31	6	619,533	11,098,099
32	7	588,735	10,478,566
33	8	560,190	9,889,831
34	9	533,670	9,329,641
35	10	508,847	8,795,971
36	11	485,449	8,287,124
37	12	463,254	7,801,675
38	13	442,084	7,338,421
39	14	421,794	6,896,337
40	15	402,271	6,474,543
41	16	383,430	6,072,272
42	17	365,205	5,688,842
43	18	347,552	5,323,637
44	19	330,442	4,976,085
45	20	313,859	4,645,643
46	21	297,797	4,331,784
47	22	282,394	4,033,987
48	23	267,630	3,751,593
49	24	253,485	3,483,963
50	25	239,938	3,230,478
51	26	226,971	2,990,540
52	27	214,563	2,763,569
53	28	202,696	2,549,006
54	29	191,350	2,346,310
55	30	180,232	2,154,960
56	31	169,500	1,974,728
57	32	159,155	1,805,228
58	33	149,190	1,646,073
59	34	139,599	1,496,883
60	35	130,372	1,357,284
61	36	121,500	1,226,912
62	37	112,972	1,105,412
63	38	104,779	992,440
64	39	96,912·9	887,660·7
65	40	89,366·1	790,747·8
66	41	82,133·2	701,381·7
67	42	75,210·6	619,248·5
68	43	68,596·4	544,037·9
69	44	62,290·4	475,441·5
70	45	56,294·3	413,151·1
71	46	50,610·8	356,856·8
72	47	45,244·0	306,246·0
73	48	40,198·4	261,002·0
74	49	35,478·4	220,803·6
75	50	31,088·2	185,325·2
76	51	27,030·8	154,237·0
77	52	23,307·8	127,206·2
78	53	19,918·4	103,898·4
79	54	16,859·4	83,980·0
80	55	14,103·0	67,120·6
81	56	11,659·7	53,017·6
82	57	9,520·31	41,357·85
83	58	7,670·98	31,837·54
84	59	6,094·23	24,166·56
85	60	4,769·41	18,072·33
86	61	3,673·45	13,302·92
87	62	2,781·71	9,629·47
88	63	2,068·83	6,847·76
89	64	1,509·49	4,778·93
90	65	1,079·27	3,269·44
91	66	755·265	2,190·165
92	67	516·651	1,434·900
93	68	345·029	918·249
94	69	224·640	573·220
95	70	142·391	348·580
96	71	87·7424	206·1885
97	72	52·4825	118·4461
98	73	30·4243	65·9636
99	74	17·0661	35·5393
100	75	9·2476	18·4732
101	76	4·8325	9·2256
102	77	2·4311	4·3931
103	78	1·1752	1·9620
104	79	·5449	.7868
105	80	·2419	·2419

Ages		$D_{x, y}$	$N_{x, y}$
x	y	Difference of Age 82 Years.	
82	0	53,298·3	210,174·4
83	1	38,065·4	156,876·1
84	2	29,106·2	118,810·7
85	3	22,583·0	89,704·5
86	4	17,477·4	67,121·5
87	5	13,414·7	49,644·1
88	6	10,181·0	36,229·4
89	7	7,620·58	26,048·35
90	8	5,613·47	18,427·77
91	9	4,065·26	12,814·30
92	10	2,890·72	8,749·04
93	11	2,015·73	5,858·32
94	12	1,376·63	3,842·59
95	13	919·633	2,465·962
96	14	600·170	1,546·329
97	15	382·166	946·159
98	16	237·138	563·993
99	17	143·212	326·855
100	18	84·0710	183·6425
101	19	47·9135	99·5715
102	20	26·4774	51·6580
103	21	14·1697	25·1806
104	22	7·3381	11·0109
105	23	3·6728	3·6728

JOINT LIVES:—Two Females.

Difference of Age 26 Years.

Difference of Age 81 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
		Difference of Age 26 Years.	
26	0	1,035,931	15,433,606
27	1	861,737	14,397,675
28	2	776,989	13,535,938
29	3	720,254	12,758,949
30	4	675,287	12,038,695
31	5	637,218	11,363,408
32	6	603,873	10,726,190
33	7	573,739	10,122,317
34	8	545,811	9,548,578
35	9	519,864	9,002,767
36	10	495,576	8,482,903
37	11	472,684	7,987,327
38	12	450,969	7,514,643
39	13	430,257	7,063,674
40	14	410,408	6,633,417
41	15	391,310	6,223,009
42	16	372,879	5,831,699
43	17	355,053	5,458,820
44	18	337,788	5,103,767
45	19	321,057	4,765,979
46	20	304,842	4,444,922
47	21	289,140	4,140,080
48	22	274,082	3,850,940
49	23	259,650	3,576,858
50	24	245,824	3,317,208
51	25	232,585	3,071,384
52	26	219,914	2,838,799
53	27	207,791	2,618,885
54	28	196,198	2,411,094
55	29	184,834	2,214,896
56	30	173,862	2,030,062
57	31	163,282	1,856,200
58	32	153,089	1,692,918
59	33	143,276	1,539,829
60	34	133,834	1,396,553
61	35	124,753	1,262,719
62	36	116,023	1,137,966
63	37	107,633	1,021,943
64	38	99,576·7	914,309·5
65	39	91,845·5	814,732·8
66	40	84,434·1	722,887·3
67	41	77,338·7	638,453·2
68	42	70,557·7	561,114·5
69	43	64,090·8	490,556·8
70	44	57,939·9	426,466·0
71	45	52,107·8	368,526·1
72	46	46,598·8	316,418·3
73	47	41,417·5	269,819·5
74	48	36,568·8	228,402·0
75	49	32,056·9	191,833·2
76	50	27,885·4	159,776·3
77	51	24,055·8	131,890·9
78	52	20,567·6	107,835·1
79	53	17,417·8	87,267·5
80	54	14,600·1	69,849·7
81	55	12,086·9	55,249·6
82	56	9,882·87	43,162·65
83	57	7,974·91	33,279·78
84	58	6,345·77	25,304·87
85	59	4,974·83	18,959·10
86	60	3,838·90	13,984·27
87	61	2,913·03	10,145·37
88	62	2,171·44	7,232·34
89	63	1,588·35	5,060·90
90	64	1,138·81	3,472·55
91	65	799·382	2,333·736
92	66	548·680	1,534·354
93	67	367·782	985·674
94	68	240·433	617·892
95	69	153·083	377·459
96	70	94·7918	224·3762
97	71	57·0011	129·5844
98	72	33·2352	72·5833
99	73	18·7599	39·3481
100	74	10·2346	20·5882
101	75	5·3876	10·3536
102	76	2·7317	4·9660
103	77	1·3318	2·2343
104	78	·6232	·9025
105	79	·2793	·2793

Difference of Age 81 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
81	0	62,880·9	258,251·5
82	1	45,441·8	195,370·6
83	2	35,184·6	149,928·8
84	3	27,664·5	114,744·2
85	4	21,713·7	87,079·7
86	5	16,916·5	65,366·0
87	6	13,042·4	48,449·5
88	7	9,925·81	35,407·08
89	8	7,440·61	25,481·27
90	9	5,488·61	18,040·66
91	10	3,979·11	12,552·05
92	11	2,831·64	8,572·94
93	12	1,975·52	5,741·30
94	13	1,349·51	3,765·78
95	14	901·543	2,416·268
96	15	588·272	1,514·725
97	16	374·470	926·453
98	17	232·258	551·983
99	18	140·187	319·725
100	19	82·2425	179·5375
101	20	46·8393	97·2950
102	21	25·8655	50·4557
103	22	13·8392	24·5902
104	23	7·1654	10·7510
105	24	3·5856	3·5856

JOINT LIVES:—TWO FEMALES.

Difference of Age 27 Years.

Difference of Age 80 Years.

Ages x	Ages y	$D_{x, y}$	$N_{x, y}$
		Difference of Age 27 Years.	
27	0	1,010,725	14,951,938
28	1	840,606	13,941,213
29	2	757,790	13,100,607
30	3	702,321	12,342,817
31	4	658,346	11,640,496
32	5	621,111	10,982,150
33	6	588,492	10,361,039
34	7	559,013	9,772,547
35	8	531,690	9,213,534
36	9	506,306	8,681,844
37	10	482,545	8,175,538
38	11	460,149	7,692,993
39	12	438,905	7,232,844
40	13	418,642	6,793,939
41	14	399,224	6,375,297
42	15	380,542	5,976,073
43	16	362,514	5,595,531
44	17	345,079	5,233,017
45	18	328,195	4,887,938
46	19	311,833	4,559,743
47	20	295,979	4,247,910
48	21	280,629	3,951,931
49	22	265,910	3,671,302
50	23	251,804	3,405,392
51	24	238,291	3,153,588
52	25	225,354	2,915,297
53	26	212,973	2,689,943
54	27	201,130	2,476,970
55	28	189,516	2,275,840
56	29	178,301	2,086,324
57	30	167,483	1,908,023
58	31	157,059	1,740,540
59	32	147,021	1,583,481
60	33	137,360	1,436,460
61	34	128,066	1,299,100
62	35	119,129	1,171,034
63	36	110,540	1,051,905
64	37	102,289	941,365
65	38	94,370·1	839,076·3
66	39	86,776·6	744,706·2
67	40	79,505·3	657,929·6
68	41	72,554·1	578,424·3
69	42	65,923·3	505,870·2
70	43	59,614·5	439,946·9
71	44	53,631·0	380,332·4
72	45	47,977·1	326,701·4
73	46	42,657·6	278,724·3
74	47	37,677·8	236,066·7
75	48	33,042·2	198,388·9
76	49	28,754·3	165,346·7
77	50	24,816·2	136,592·4
78	51	21,227·6	111,776·2
79	52	17,985·4	90,548·6
80	53	15,083·7	72,563·2
81	54	12,513·0	57,479·5
82	55	10,244·9	44,966·5
83	56	8,278·62	34,721·60
84	57	6,597·18	26,442·98
85	58	5,180·16	19,845·80
86	59	4,004·24	14,665·64
87	60	3,044·23	10,661·40
88	61	2,273·94	7,617·17
89	62	1,667·13	5,343·23
90	63	1,198·31	3,676·10
91	64	843·487	2,477·794
92	65	580·730	1,634·307
93	66	390·583	1,053·577
94	67	256·288	662·994
95	68	163·845	406·706
96	69	101·910	242·861
97	70	61·5807	140·9513
98	71	36·0967	79·3706
99	72	20·4932	43·2739
100	73	11·2505	22·7807
101	74	5·9626	11·5302
102	75	3·0455	5·5676
103	76	1·4965	2·5221
104	77	·7062	1·0256
105	78	·3194	·3194

Ages x	Ages y	$D_{x, y}$	$N_{x, y}$
		Difference of Age 80 Years.	
80	0	73,369·2	313,842·6
81	1	53,611·8	240,473·4
82	2	42,002·8	186,861·6
83	3	33,441·8	144,858·8
84	4	26,599·6	111,417·0
85	5	21,016·9	84,817·4
86	6	16,447·0	63,800·5
87	7	12,715·4	47,353·5
88	8	9,691·40	34,638·07
89	9	7,275·11	24,946·67
90	10	5,372·30	17,671·56
91	11	3,897·79	12,299·26
92	12	2,775·15	8,401·47
93	13	1,936·59	5,626·32
94	14	1,322·96	3,689·73
95	15	883·670	2,366·774
96	16	576·426	1,483·104
97	17	366·763	906·678
98	18	227·351	539·915
99	19	137·138	312·564
100	20	80·3987	175·4260
101	21	45·7569	95·0273
102	22	25·2621	49·2704
103	23	13·5134	24·0083
104	24	6·9952	10·4949
105	25	3·4997	3·4997

JOINT LIVES:—TWO FEMALES.

Difference of Age 28 Years.

Difference of Age 79 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 28 Years.**	
28	0	985,940	14,478,959
29	1	819,835	13,493,019
30	2	738,923	12,673,184
31	3	684,702	11,934,261
32	4	641,705	11,249,559
33	5	605,291	10,607,854
34	6	573,386	10,002,563
35	7	544,550	9,429,177
36	8	517,824	8,884,627
37	9	492,993	8,366,803
38	10	469,749	7,873,810
39	11	447,839	7,404,061
40	12	427,057	6,956,222
41	13	407,235	6,529,165
42	14	388,239	6,121,930
43	15	369,964	5,733,691
44	16	352,330	5,363,727
45	17	335,278	5,011,397
46	18	318,766	4,676,119
47	19	302,767	4,357,353
48	20	287,267	4,054,586
49	21	272,261	3,767,319
50	22	257,874	3,495,058
51	23	244,087	3,237,184
52	24	230,882	2,993,097
53	25	218,241	2,762,215
54	26	206,146	2,543,974
55	27	194,280	2,337,828
56	28	182,819	2,143,548
57	29	171,760	1,960,729
58	30	161,101	1,788,969
59	31	150,834	1,627,868
60	32	140,950	1,477,034
61	33	131,440	1,336,084
62	34	122,293	1,204,644
63	35	113,500	1,082,351
64	36	105,052	968,851
65	37	96,940·8	863,798·7
66	38	89,161·9	766,857·9
67	39	81,711·1	677,696·0
68	40	74,586·6	595,984·9
69	41	67,788·6	521,398·3
70	42	61,319·0	453,609·7
71	43	55,181·2	392,290·7
72	44	49,379·6	337,109·5
73	45	43,919·4	287,729·9
74	46	38,806·0	243,810·5
75	47	34,044·3	205,004·5
76	48	29,638·1	170,960·2
77	49	25,589·5	141,322·1
78	50	21,898·6	115,732·6
79	51	18,562·5	93,834·0
80	52	15,575·3	75,271·5
81	53	12,927·4	59,696·2
82	54	10,606·1	46,768·8
83	55	8,581·92	36,162·66
84	56	6,848·43	27,580·74
85	57	5,385·40	20,732·31
86	58	4,169·51	15,346·91
87	59	3,175·35	11,177·40
88	60	2,376·36	8,002·05
89	61	1,745·83	5,625·69
90	62	1,257·74	3,879·86
91	63	887·554	2,622·119
92	64	612·770	1,734·565
93	65	413·398	1,121·795
94	66	272·176	708·397
95	67	174·649	436·221
96	68	109·074	261·572
97	69	66·2046	152·4977
98	70	38·9968	86·2931
99	71	22·2576	47·2963
100	72	12·2899	25·0387
101	73	6·5544	12·7488
102	74	3·3705	6·1944
103	75	1·6684	2·8239
104	76	·7935	1·1555
105	77	·3620	·3620

Difference of Age 79 Years.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
79	0	84,722·5	377,449·4
80	1	62,554·1	292,726·9
81	2	49,554·5	230,172·8
82	3	39,922·2	180,618·3
83	4	32,154·5	140,696·1
84	5	25,745·9	108,541·6
85	6	20,433·6	82,795·7
86	7	16,034·7	62,362·1
87	8	12,415·1	46,327·4
88	9	9,475·83	33,912·29
89	10	7,120·94	24,436·46
90	11	5,262·51	17,315·52
91	12	3,820·03	12,053·01
92	13	2,720·48	8,232·98
93	14	1,898·50	5,512·50
94	15	1,296·74	3,614·00
95	16	865·876	2,317·255
96	17	564·563	1,451·379
97	18	359·014	886·816
98	19	222·406	527·802
99	20	134·063	305·396
100	21	78·5407	171·3330
101	22	44·6894	92·7923
102	23	24·6675	48·1029
103	24	13·1925	23·4354
104	25	6·8277	10·2429
105	26	3·4152	3·4152

JOINT LIVES:—TWO FEMALES.

Difference of Age 29 Years.

Difference of Age 78 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
		Difference of Age 29 Years.	
29	0	961,578	14,014,562
30	1	799,423	13,052,984
31	2	720,386	12,253,561
32	3	667,395	11,533,175
33	4	625,360	10,865,780
34	5	589,754	10,240,420
35	6	558,552	9,650,666
36	7	530,349	9,092,114
37	8	504,208	8,561,765
38	9	479,919	8,057,557
39	10	457,182	7,577,638
40	11	435,749	7,120,456
41	12	415,419	6,684,707
42	13	396,029	6,269,288
43	14	377,447	5,873,259
44	15	359,571	5,495,812
45	16	342,323	5,136,241
46	17	325,646	4,793,918
47	18	309,499	4,468,272
48	19	293,855	4,158,773
49	20	278,702	3,864,918
50	21	264,033	3,586,216
51	22	249,972	3,322,183
52	23	236,498	3,072,211
53	24	223,595	2,835,713
54	25	211,245	2,612,118
55	26	199,126	2,400,873
56	27	187,414	2,201,747
57	28	176,112	2,014,333
58	29	165,214	1,838,221
59	30	154,715	1,673,007
60	31	144,605	1,518,292
61	32	134,875	1,373,687
62	33	125,515	1,238,812
63	34	116,514	1,113,297
64	35	107,865	996,783
65	36	99,558·7	888,917·5
66	37	91,590·8	789,358·8
67	38	83,957·1	697,768·0
68	39	76,656·0	613,810·9
69	40	69,687·6	537,154·9
70	41	63,054·1	467,467·3
71	42	56,758·9	404,413·2
72	43	50,806·8	347,654·3
73	44	45,203·2	296,847·5
74	45	39,953·8	251,644·3
75	46	35,063·7	211,690·5
76	47	30,536·9	176,626·8
77	48	26,376·0	146,089·9
78	49	22,581·0	119,713·9
79	50	19,149·4	97,132·9
80	51	16,075·1	77,983·5
81	52	13,348·7	61,908·4
82	53	10,957·4	48,559·7
83	54	8,884·47	37,602·26
84	55	7,099·33	28,717·79
85	56	5,590·49	21,618·46
86	57	4,334·71	16,027·97
87	58	3,306·41	11,693·26
88	59	2,478·71	8,386·85
89	60	1,824·46	5,908·14
90	61	1,317·12	4,083·68
91	62	931·575	2,766·564
92	63	644·784	1,834·989
93	64	436·206	1,190·205
94	65	288·075	753·999
95	66	185·476	465·924
96	67	116·267	280·448
97	68	70·8587	164·1805
98	69	41·9250	93·3218
99	70	24·0458	51·3968
100	71	13·3480	27·3510
101	72	7·1600	14·0030
102	73	3·7051	6·8430
103	74	1·8465	3·1379
104	75	·8847	1·2914
105	76	·4067	·4067

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
		Difference of Age 78 Years.	
78	0	96,886·1	449,514·4
79	1	72,233·8	352,628·3
80	2	57,820·0	280,394·5
81	2	47,099·9	222,574·5
82	4	38,385·5	175,474·6
83	5	31,122·6	137,089·1
84	6	25,031·4	105,966·5
85	7	19,921·3	80,935·1
86	8	15,656·0	61,013·8
87	9	12,139·0	45,357·8
88	10	9,275·02	33,218·75
89	11	6,975·41	23,943·73
90	12	5,157·53	16,968·32
91	13	3,744·77	11,810·79
92	14	2,666·96	8,066·02
93	15	1,860·86	5,399·06
94	16	1,270·62	3,538·20
95	17	848·055	2,267·580
96	18	552·635	1,419·525
97	19	351·206	866·890
98	20	217·420	515·684
99	21	130·965	298·264
100	22	76·7085	167·2992
101	23	43·6374	90·5907
102	24	24·0817	46·9533
103	25	12·8766	22·8716
104	26	6·6629	9·9950
105	27	3·3321	3·3321

JOINT LIVES:—TWO FEMALES.

Difference of Age 30 Years.

Difference of Age 77 Years.

Difference of Age 30 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
30	0	937,637	13,558,649
31	1	779,368	12,621,012
32	2	702,176	11,841,644
33	3	650,396	11,139,468
34	4	609,308	10,489,072
35	5	574,497	9,879,764
36	6	543,986	9,305,267
37	7	516,403	8,761,281
38	8	490,837	8,244,878
39	9	467,080	7,754,041
40	10	444,840	7,286,961
41	11	423,875	6,842,121
42	12	403,988	6,418,246
43	13	385,020	6,014,258
44	14	366,844	5,629,238
45	15	349,359	5,262,394
46	16	332,489	4,913,035
47	17	316,179	4,580,546
48	18	300,389	4,264,367
49	19	285,093	3,963,978
50	20	270,279	3,678,885
51	21	255,942	3,408,606
52	22	242,200	3,152,664
53	23	229,034	2,910,464
54	24	216,428	2,681,430
55	25	204,052	2,465,002
56	26	192,088	2,260,950
57	27	180,539	2,068,862
58	28	169,400	1,888,323
59	29	158,665	1,718,923
60	30	148,326	1,560,258
61	31	138,373	1,411,932
62	32	128,796	1,273,559
63	33	119,584	1,144,763
64	34	110,729	1,025,179
65	35	102,225	914,450
66	36	94,064·2	812,225·0
67	37	86,244·2	718,160·8
68	38	78,763·0	631,916·6
69	39	71,621·0	553,153·6
70	40	64,820·4	481,532·6
71	41	58,364·9	416,712·2
72	42	52,259·5	358,347·3
73	43	46,509·8	306,087·8
74	44	41,121·7	259,578·0
75	45	36,100·8	218,456·3
76	46	31,451·3	182,355·5
77	47	27,175·9	150,904·2
78	48	23,275·0	123,728·3
79	49	19,746·1	100,453·3
80	50	16,583·2	80,707·2
81	51	13,777·1	64,124·0
82	52	11,314·5	50,346·9
83	53	9,178·71	39,032·37
84	54	7,349·62	29,853·66
85	55	5,795·31	22,504·04
86	56	4,499·79	16,708·73
87	57	3,437·41	12,208·94
88	58	2,581·02	8,771·53
89	59	1,903·04	6,190·51
90	60	1,376·44	4,287·47
91	61	975·551	2,911·026
92	62	676·764	1,935·475
93	63	458·995	1,258·711
94	64	303·969	799·716
95	65	196·311	495·747
96	66	123·474	299·436
97	67	75·5316	175·9617
98	68	44·8723	100·4301
99	69	25·8513	55·5578
100	70	14·4205	29·7065
101	71	7·7764	15·2860
102	72	4·0474	7·5096
103	73	2·0297	3·4622
104	74	·9791	1·4325
105	75	·4534	·4534

Difference of Age 77 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
77	0	109,794	530,414
78	1	82,604·5	420,619·7
79	2	66,767·2	338,015·2
80	3	54,956·0	271,248·0
81	4	45,286·9	216,292·0
82	5	37,153·6	171,005·1
83	6	30,258·8	133,851·5
84	7	24,403·9	103,592·7
85	8	19,450·9	79,188·8
86	9	15,307·8	59,737·9
87	10	11,881·7	44,430·1
88	11	9,085·48	32,548·43
89	12	6,836·26	23,462·95
90	13	5,055·91	16,626·69
91	14	3,671·11	11,570·78
92	15	2,614·09	7,899·67
93	16	1,823·39	5,285·58
94	17	1,244·47	3,462·19
95	18	830·138	2,217·716
96	19	540·615	1,387·578
97	20	343·332	846·963
98	21	212·395	503·631
99	22	127·910	291·236
100	23	74·9027	163·3260
101	24	42·6012	88·4233
102	25	23·5051	45·8221
103	26	12·5658	22·3170
104	27	6·5008	9·7512
105	28	3·2504	3·2504

JOINT LIVES:—Two Females.

Difference of Age 31 Years.

Difference of Age 76 Years.

Difference of Age 31 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
31	0	914,115	13,111,107
32	1	759,668	12,196,992
33	2	684,291	11,437,324
34	3	633,702	10,753,033
35	4	593,545	10,119,331
36	5	559,514	9,525,786
37	6	529,681	8,966,272
38	7	502,709	8,436,591
39	8	477,706	7,933,882
40	9	454,471	7,456,176
41	10	432,718	7,001,705
42	11	412,212	6,568,987
43	12	392,759	6,156,775
44	13	374,204	5,764,016
45	14	356,424	5,389,812
46	15	339,322	5,033,388
47	16	322,823	4,694,066
48	17	306,872	4,371,243
49	18	291,432	4,064,371
50	19	276,478	3,772,939
51	20	261,997	3,496,461
52	21	247,985	3,234,464
53	22	234,555	2,986,479
54	23	221,692	2,751,924
55	24	209,057	2,530,232
56	25	196,840	2,321,175
57	26	185,041	2,124,335
58	27	173,658	1,939,294
59	28	162,685	1,765,636
60	29	152,114	1,602,951
61	30	141,934	1,450,837
62	31	132,136	1,308,903
63	32	122,709	1,176,767
64	33	113,646	1,054,058
65	34	104,940	940,412
66	35	96,583·0	835,472·2
67	36	88,573·2	738,889·2
68	37	80,908·6	650,316·0
69	38	73,589·7	569,407·4
70	39	66,618·8	495,817·7
71	40	59,999·9	429,198·9
72	41	53,738·2	369,199·0
73	42	47,839·6	315,460·8
74	43	42,310·3	267,621·2
75	44	37,156·1	225,310·9
76	45	32,381·5	188,154·8
77	46	27,989·7	155,773·3
78	47	23,980·9	127,783·6
79	48	20,353·0	103,802·7
80	49	17,100·0	83,449·7
81	50	14,212·6	66,349·7
82	51	11,677·6	52,137·1
83	52	9,477·85	40,459·50
84	53	7,593·03	30,981·65
85	54	5,999·62	23,388·62
86	55	4,664·65	17,389·00
87	56	3,568·31	12,724·35
88	57	2,683·28	9,156·04
89	58	1,981·59	6,472·76
90	59	1,435·72	4,491·17
91	60	1,019·49	3,055·45
92	61	708·712	2,035·961
93	62	481·761	1,327·249
94	63	319·849	845·488
95	64	207·142	525·639
96	65	130·687	318·497
97	66	80·2140	187·8097
98	67	47·8314	107·5957
99	68	27·6687	59·7643
100	69	15·5032	32·0956
101	70	8·4012	16·5924
102	71	4·3959	8·1912
103	72	2·2173	3·7953
104	73	1·0762	1·5780
105	74	·5018	·5018

Difference of Age 76 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
76	0	123,373	620,455
77	1	93,610·0	497,081·8
78	2	76,353·0	403,471·8
79	3	63,460·0	327,118·8
80	4	52,840·6	263,658·8
81	5	43,833·5	210,818·2
82	6	36,122·5	166,984·7
83	7	29,500·3	130,862·2
84	8	23,827·6	101,361·9
85	9	19,018·2	77,534·3
86	10	14,983·4	58,516·1
87	11	11,638·9	43,532·7
88	12	8,904·23	31,893·81
89	13	6,701·57	22,989·58
90	14	4,956·46	16,288·01
91	15	3,598·33	11,331·55
92	16	2,561·45	7,733·22
93	17	1,785·86	5,171·77
94	18	1,218·18	3,385·91
95	19	812·083	2,167·730
96	20	528·495	1,355·647
97	21	335·398	827·152
98	22	207·441	491·754
99	23	124·899	284·313
100	24	73·1241	159·4144
101	25	41·5811	86·2903
102	26	22·9377	44·7092
103	27	12·2600	21·7715
104	28	6·3414	9·5115
105	29	3·1701	3·1701

JOINT LIVES:—TWO FEMALES.

Difference of Age 32 Years.

Difference of Age 75 Years.

Difference of Age 32 Years.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
32	0	891,009	12,671,829
33	1	740,319	11,780,820
34	2	666,727	11,040,501
35	3	617,307	10,373,774
36	4	578,066	9,756,467
37	5	544,802	9,178,401
38	6	515,635	8,633,599
39	7	489,260	8,117,964
40	8	464,810	7,628,704
41	9	442,087	7,163,894
42	10	420,811	6,721,807
43	11	400,753	6,300,996
44	12	381,725	5,900,243
45	13	363,576	5,518,518
46	14	346,185	5,154,942
47	15	329,457	4,808,757
48	16	313,320	4,479,300
49	17	297,722	4,165,980
50	18	282,625	3,868,258
51	19	268,005	3,585,633
52	20	253,851	3,317,628
53	21	240,158	3,063,777
54	22	227,036	2,823,619
55	23	214,142	2,596,583
56	24	201,669	2,382,441
57	25	189,619	2,180,772
58	26	177,989	1,991,153
59	27	166,775	1,813,164
60	28	155,968	1,646,389
61	29	145,558	1,490,421
62	30	135,536	1,344,863
63	31	125,892	1,209,327
64	32	116,617	1,083,435
65	33	107,704	966,818
66	34	99,148·0	859,114·2
67	35	90,945·0	759,966·2
68	36	83,093·6	669,021·2
69	37	75,594·4	585,927·6
70	38	68,450·0	510,333·2
71	39	61,664·6	441,883·2
72	40	55,243·6	380,218·6
73	41	49,193·2	324,975·0
74	42	43,520·0	275,781·8
75	43	38,230·0	232,261·8
76	44	33,328·1	194,031·8
77	45	28,817·5	160,703·7
78	46	24,699·0	131,886·2
79	47	20,970·2	107,187·2
80	48	17,625·5	86,217·0
81	49	14,655·5	68,591·5
82	50	12,046·7	53,936·0
83	51	9,781·98	41,889·29
84	52	7,840·48	32,107·31
85	53	6,198·32	24,266·83
86	54	4,829·10	18,068·51
87	55	3,699·05	13,239·41
88	56	2,785·47	9,540·36
89	57	2,060·10	6,754·89
90	58	1,494·98	4,694·79
91	59	1,063·40	3,199·81
92	60	740·632	2,136·408
93	61	504·503	1,395·776
94	62	335·713	891·273
95	63	217·964	555·560
96	64	137·897	337·596
97	65	84·8995	199·6991
98	66	50·7966	114·7996
99	67	29·4933	64·0030
100	68	16·5931	34·5097
101	69	9·0320	17·9166
102	70	4·7490	8·8846
103	71	2·4082	4·1356
104	72	1·1757	1·7274
105	73	·5517	·5517

Difference of Age 75 Years.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
75	0	137,543	719,872
76	1	105,187	582,329
77	2	86,525·6	477,141·6
78	3	72,570·9	390,616·0
79	4	61,017·2	318,045·1
80	5	51,144·7	257,027·9
81	6	42,616·9	205,883·2
82	7	35,216·9	163,266·3
83	8	28,803·6	128,049·4
84	9	23,297·6	99,245·8
85	10	18,615·2	75,948·2
86	11	14,677·2	57,333·0
87	12	11,406·8	42,655·8
88	13	8,728·80	31,248·96
89	14	6,569·75	22,520·16
90	15	4,858·20	15,950·41
91	16	3,525·87	11,092·21
92	17	2,508·73	7,566·34
93	18	1,748·13	5,057·61
94	19	1,191·69	3,309·48
95	20	793·877	2,117·788
96	21	516·282	1,323·911
97	22	327·574	807·629
98	23	202·557	480·055
99	24	121·933	277·498
100	25	71·3732	155·5654
101	26	40·5774	84·1922
102	27	22·3795	43·6148
103	28	11·9594	21·2353
104	29	6·1847	9·2759
105	30	3·0912	3·0912

JOINT LIVES:—Two Females.

Difference of Age 33 Years.

Difference of Age 74 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 33 Years.**	
33	0	868,314	12,240,700
34	1	721,316	11,372,386
35	2	649,478	10,651,070
36	3	601,208	10,001,592
37	4	562,866	9,400,384
38	5	530,354	8,837,518
39	6	501,841	8,307,164
40	7	476,053	7,805,323
41	8	452,144	7,329,270
42	9	429,922	6,877,126
43	10	409,114	6,447,204
44	11	389,495	6,038,090
45	12	370,884	5,648,595
46	13	353,131	5,277,711
47	14	336,121	4,924,580
48	15	319,760	4,588,459
49	16	303,978	4,268,699
50	17	288,725	3,964,721
51	18	273,964	3,675,996
52	19	259,673	3,402,032
53	20	245,839	3,142,359
54	21	232,459	2,896,520
55	22	219,305	2,664,061
56	23	206,574	2,444,756
57	24	194,270	2,238,182
58	25	182,392	2,043,912
59	26	170,934	1,861,520
60	27	159,888	1,690,586
61	28	149,246	1,530,698
62	29	138,996	1,381,452
63	30	129,131	1,242,456
64	31	119,641	1,113,325
65	32	110,519	993,684
66	33	101,760	883,165
67	34	93,360·3	781,404·5
68	35	85,318·6	688,044·2
69	36	77,635·8	602,725·6
70	37	70,314·7	525,089·8
71	38	63,359·5	454,775·1
72	39	56,776·2	391,415·6
73	40	50,571·5	334,639·4
74	41	44,751·5	284,068·1
75	42	39,323·1	239,316·6
76	43	34,291·4	199,993·5
77	44	29,659·9	165,702·1
78	45	25,429·5	136,042·2
79	46	21,598·1	110,612·7
80	47	18,160·1	89,014·6
81	48	15,105·9	70,854·5
82	49	12,422·1	55,748·6
83	50	10,091·2	43,326·5
84	51	8,092·08	33,235·27
85	52	6,400·33	25,143·19
86	53	4,989·03	18,742·86
87	54	3,829·46	13,753·83
88	55	2,887·52	9,924·37
89	56	2,138·55	7,036·85
90	57	1,554·21	4,898·30
91	58	1,107·29	3,344·09
92	59	772·532	2,236·804
93	60	527·225	1,464·272
94	61	351·561	937·047
95	62	228·774	585·486
96	63	145·102	356·712
97	64	89·5837	211·6101
98	65	53·7638	122·0264
99	66	31·3217	68·2626
100	67	17·6873	36·9409
101	68	9·6669	19·2536
102	69	5·1056	9·5867
103	70	2·6016	4·4811
104	71	1·2769	1·8795
105	72	·6026	·6026
		Difference of Age 74 Years.	
74	0	152,223	828,831
75	1	117,269	676,608
76	2	97,226·6	559,339·0
77	3	82,239·7	462,112·4
78	4	69,777·4	379,872·7
79	5	59,059·0	310,095·3
80	6	49,725·3	251,036·3
81	7	41,548·6	201,311·0
82	8	34,385·2	159,762·4
83	9	28,162·9	125,377·2
84	10	22,803·8	97,214·3
85	11	18,234·8	74,410·5
86	12	14,384·4	56,175·7
87	13	11,182·0	41,791·3
88	14	8,557·10	30,609·25
89	15	6,439·50	22,052·15
90	16	4,760·37	15,612·65
91	17	3,453·30	10,852·28
92	18	2,455·73	7,398·98
93	19	1,710·11	4,943·25
94	20	1,164·97	3,233·14
95	21	775·531	2,068·172
96	22	504·238	1,292·641
97	23	319·863	788·403
98	24	197·748	468·540
99	25	119·013	270·792
100	26	69·6502	151·7792
101	27	39·5900	82·1290
102	28	21·8308	42·5390
103	29	11·6639	20·7082
104	30	6·0307	9·0443
105	31	3·0136	3·0136

JOINT LIVES:—Two Females.

Difference of Age 34 Years.

Difference of Age 73 Years.

Difference of Age 34 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
34	0	846,026	11,817,605
35	1	702,655	10,971,579
36	2	632,540	10,268,924
37	3	585,399	9,636,384
38	4	547,939	9,050,985
39	5	516,166	8,503,046
40	6	488,293	7,986,880
41	7	463,080	7,498,587
42	8	439,702	7,035,507
43	9	417,972	6,595,805
44	10	397,621	6,177,833
45	11	378,433	5,780,212
46	12	360,229	5,401,779
47	13	342,865	5,041,550
48	14	326,227	4,698,685
49	15	310,225	4,372,458
50	16	294,792	4,062,233
51	17	279,877	3,767,441
52	18	265,446	3,487,564
53	19	251,477	3,222,118
54	20	237,958	2,970,641
55	21	224,543	2,732,683
56	22	211,554	2,508,140
57	23	198,996	2,296,586
58	24	186,867	2,097,590
59	25	175,163	1,910,723
60	26	163,876	1,735,560
61	27	152,997	1,571,684
62	28	142,518	1,418,687
63	29	132,428	1,276,169
64	30	122,720	1,143,741
65	31	113,385	1,021,021
66	32	104,420	907,636
67	33	95,819·8	803,216·1
68	34	87,584·5	707,396·3
69	35	79,714·7	619,811·8
70	36	72,213·5	540,097·1
71	37	65,085·5	467,883·6
72	38	58,336·9	402,798·1
73	39	51,974·3	344,461·2
74	40	46,005·1	292,486·9
75	41	40,435·8	246,481·8
76	42	35,271·9	206,046·0
77	43	30,517·2	170,774·1
78	44	26,172·9	140,256·9
79	45	22,237·0	114,084·0
80	46	18,703·9	91,847·0
81	47	15,564·1	73,143·1
82	48	12,803·9	57,579·0
83	49	10,405·7	44,775·1
84	50	8,347·89	34,369·43
85	51	6,605·71	26,021·54
86	52	5,151·63	19,415·83
87	53	3,956·28	14,264·20
88	54	2,989·31	10,307·92
89	55	2,216·90	7,318·61
90	56	1,613·40	5,101·71
91	57	1,151·16	3,488·31
92	58	804·417	2,337·147
93	59	549·934	1,532·730
94	60	367·395	982·796
95	61	239·574	615·401
96	62	152·298	375·827
97	63	94·2640	223·5293
98	64	56·7301	129·2653
99	65	33·1513	72·5352
100	66	18·7839	39·3839
101	67	10·3044	20·6000
102	68	5·4646	10·2956
103	69	2·7970	4·8310
104	70	1·3795	2·0340
105	71	·6545	·6545

Difference of Age 73 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
73	0	167,332	947,430
74	1	129,785	780,098
75	2	108,394	650,313
76	3	92,410·7	541,918·7
77	4	79,074·0	449,508·0
78	5	67,538·1	370,434·0
79	6	57,419·9	302,895·9
80	7	48,478·8	245,476·0
81	8	40,567·4	196,997·2
82	9	33,620·4	156,429·8
83	10	27,566·1	122,809·4
84	11	22,337·8	95,243·3
85	12	17,871·0	72,905·5
86	13	14,101·0	55,034·5
87	14	10,962·1	40,933·5
88	15	8,387·45	29,971·44
89	16	6,309·83	21,583·99
90	17	4,662·40	15,274·16
91	18	3,380·34	10,611·76
92	19	2,402·32	7,231·42
93	20	1,671·77	4,829·10
94	21	1,138·05	3,157·33
95	22	757·439	2,019·282
96	23	492·368	1,261·843
97	24	312·267	769·475
98	25	193·012	457·208
99	26	116·140	264·196
100	27	67·9554	148·0563
101	28	38·6192	80·1009
102	29	21·2913	41·4817
103	30	11·3735	20·1904
104	31	5·8794	8·8169
105	32	2·9375	2·9375

JOINT LIVES:—Two Females.

Difference of Age 35 Years.

Difference of Age 72 Years.

Difference of Age 35 Years.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
35	0	824,139	11,402,432
36	1	684,330	10,578,293
37	2	615,907	9,893,963
38	3	569,875	9,278,056
39	4	533,280	8,708,181
40	5	502,232	8,174,901
41	6	474,987	7,672,669
42	7	450,338	7,197,682
43	8	427,480	6,747,344
44	9	406,230	6,319,864
45	10	386,328	5,913,634
46	11	367,561	5,527,306
47	12	349,756	5,159,745
48	13	332,773	4,809,989
49	14	316,500	4,477,216
50	15	300,850	4,160,716
51	16	285,758	3,859,866
52	17	271,175	3,574,108
53	18	257,068	3,302,933
54	19	243,416	3,045,865
55	20	229,855	2,802,449
56	21	216,607	2,572,594
57	22	203,793	2,355,987
58	23	191,412	2,152,194
59	24	179,460	1,960,782
60	25	167,930	1,781,322
61	26	156,813	1,613,392
62	27	146,101	1,456,579
63	28	135,783	1,310,478
64	29	125,853	1,174,695
65	30	116,303	1,048,842
66	31	107,128	932,539
67	32	98,324·2	825,411·3
68	33	89,891·9	727,087·1
69	34	81,831·8	637,195·2
70	35	74,147·2	555,363·4
71	36	66,843·2	481,216·2
72	37	59,926·0	414,373·0
73	38	53,403·0	354,447·0
74	39	47,281·5	301,044·0
75	40	41,568·5	253,762·5
76	41	36,269·9	212,194·0
77	42	31,389·8	175,924·1
78	43	26,929·4	144,534·3
79	44	22,887·0	117,604·9
80	45	19,257·1	94,717·9
81	46	16,030·1	75,460·8
82	47	13,192·2	59,430·7
83	48	10,725·5	46,238·5
84	49	8,608·02	35,513·03
85	50	6,814·53	26,905·01
86	51	5,316·93	20,090·48
87	52	4,085·22	14,773·55
88	53	3,088·32	10,688·33
89	54	2,295·06	7,600·01
90	55	1,672·51	5,304·95
91	56	1,195·00	3,632·44
92	57	836·288	2,437·437
93	58	572·631	1,601·149
94	59	383·219	1,028·518
95	60	250·364	645·299
96	61	159·488	394·935
97	62	98·9393	235·4466
98	63	59·6940	136·5073
99	64	34·9803	76·8133
100	65	19·8811	41·8330
101	66	10·9432	21·9519
102	67	5·8249	11·0087
103	68	2·9936	5·1838
104	69	1·4831	2·1902
105	70	·7071	·7071

Difference of Age 72 Years.

Ages x	Ages y	$D_{x,y}$	$N_{x,}$
72	0	182,792	1,075,702
73	1	142,666	892,910
74	2	119,963	750,244
75	3	103,025	630,281
76	4	88,853·5	527,256·4
77	5	76,536·3	438,402·9
78	6	65,663·7	361,866·6
79	7	55,980·5	296,202·9
80	8	47,333·9	240,222·4
81	9	39,665·0	192,888·5
82	10	32,907·9	153,223·5
83	11	27,002·7	120,315·6
84	12	21,892·2	93,312·9
85	13	17,518·9	71,420·7
86	14	13,823·6	53,901·8
87	15	10,744·7	40,078·2
88	16	8,218·55	29,333·47
89	17	6,179·97	21,114·92
90	18	4,563·89	14,934·95
91	19	3,306·82	10,371·06
92	20	2,348·46	7,064·24
93	21	1,633·14	4,715·78
94	22	1,111·50	3,082·64
95	23	739·608	1,971·138
96	24	480·676	1,231·530
97	25	304·790	750·854
98	26	188·353	446·064
99	27	113·314	257·711
100	28	66·2891	144·3968
101	29	37·6650	78·1077
102	30	20·7612	40·4427
103	31	11·0881	19·6815
104	32	5·7308	8·5934
105	33	2·8626	2·8626

JOINT LIVES:—Two Females.

Difference of Age 36 Years.

Difference of Age 71 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Difference of Age 36 Years.**	
36	0	802,646	10,995,064
37	1	666,336	10,192,418
38	2	599,574	9,526,082
39	3	554,630	8,926,508
40	4	518,884	8,371,878
41	5	488,546	7,852,994
42	6	461,917	7,364,448
43	7	437,820	6,902,531
44	8	415,471	6,464,711
45	9	394,692	6,049,240
46	10	375,229	5,654,548
47	11	356,875	5,279,319
48	12	339,461	4,922,444
49	13	322,850	4,582,983
50	14	306,935	4,260,133
51	15	291,631	3,953,198
52	16	276,874	3,661,567
53	17	262,617	3,384,693
54	18	248,827	3,122,076
55	19	235,126	2,873,249
56	20	221,731	2,638,123
57	21	208,661	2,416,392
58	22	196,026	2,207,731
59	23	183,825	2,011,705
60	24	172,049	1,827,880
61	25	160,692	1,655,831
62	26	149,744	1,495,139
63	27	139,197	1,345,395
64	28	129,042	1,206,198
65	29	119,272	1,077,156
66	30	109,884	957,884
67	31	100,874	848,000
68	32	92,241·3	747,126·2
69	33	83,987·6	654,884·9
70	34	76,116·4	570,897·3
71	35	68,633·1	494,780·9
72	36	61,544·4	426,147·8
73	37	54,857·8	364,603·4
74	38	48,581·1	309,745·6
75	39	42,721·8	261,164·5
76	40	37,286·0	218,442·7
77	41	32,277·9	181,156·7
78	42	27,699·3	148,878·8
79	43	23,548·5	121,179·5
80	44	19,820·0	97,631·0
81	45	16,504·2	77,811·0
82	46	13,587·2	61,306·8
83	47	11,050·8	47,719·6
84	48	8,872·58	36,668·76
85	49	7,026·88	27,796·18
86	50	5,485·02	20,769·30
87	51	4,216·31	15,284·28
88	52	3,188·97	11,067·97
89	53	2,371·07	7,879·00
90	54	1,731·48	5,507·93
91	55	1,238·78	3,776·45
92	56	868·137	2,537·669
93	57	595·319	1,669·532
94	58	399·036	1,074·213
95	59	261·148	675·177
96	60	166·671	414·029
97	61	103·610	247·358
98	62	62·6547	143·7476
99	63	36·8079	81·0929
100	64	20·9780	44·2850
101	65	11·5825	23·3070
102	66	6·1860	11·7245
103	67	3·1910	5·5385
104	68	1·5873	2·3475
105	69	·7602	·7602

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Difference of Age 71 Years.**	
71	0	198,530	1,213,627
72	1	155,847	1,015,097
73	2	131,869	859,250
74	3	114,020	727,381
75	4	99,058·9	613,361·4
76	5	86,001·9	514,302·5
77	6	74,412·1	428,300·6
78	7	64,017·6	353,888·5
79	8	54,658·4	289,870·9
80	9	46,281·0	235,212·5
81	10	38,824·5	188,931·5
82	11	32,235·4	150,107·0
83	12	26,464·1	117,871·6
84	13	21,460·9	91,407·5
85	14	17,174·3	69,946·6
86	15	13,549·5	52,772·3
87	16	10,528·4	39,222·8
88	17	8,049·41	28,694·44
89	18	6,049·40	20,645·03
90	19	4,464·63	14,595·63
91	20	3,232·69	10,131·00
92	21	2,294·19	6,898·31
93	22	1,595·04	4,604·12
94	23	1,085·33	3,009·08
95	24	722·046	1,923·752
96	25	469·167	1,201·706
97	26	297·432	732·539
98	27	183·770	435·107
99	28	110·536	251·337
100	29	64·6511	140·8006
101	30	36·7272	76·1495
102	31	20·2404	39·4223
103	32	10·8079	19·1819
104	33	5·5848	8·3740
105	34	2·7892	2·7892

JOINT LIVES:—Two Females.

Difference of Age 37 Years.

Difference of Age 70 Years.

Difference of Age 37 Years.

Ages x	Ages y	$D_{x,\ y}$	$N_{x,\ y}$
37	0	781,540	10,595,396
38	1	648,665	9,813,856
39	2	583,534	9,165,191
40	3	539,658	8,581,657
41	4	504,745	8,041,999
42	5	475,103	7,537,254
43	6	449,077	7,062,151
44	7	425,521	6,613,074
45	8	403,671	6,187,553
46	9	383,353	5,783,882
47	10	364,321	5,400,529
48	11	346,371	5,036,208
49	12	329,339	4,689,837
50	13	313,094	4,360,498
51	14	297,529	4,047,404
52	15	282,564	3,749,875
53	16	268,135	3,467,311
54	17	254,198	3,199,176
55	18	240,354	2,944,978
56	19	226,816	2,704,624
57	20	213,597	2,477,808
58	21	200,709	2,264,211
59	22	188,256	2,063,502
60	23	176,234	1,875,246
61	24	164,634	1,699,012
62	25	153,448	1,534,378
63	26	142,668	1,380,930
64	27	132,285	1,238,262
65	28	122,294	1,105,977
66	29	112,690	983,683
67	30	103,470	870,993
68	31	94,633·4	767,522·5
69	32	86,182·7	672,889·1
70	33	78,121·7	586,706·4
71	34	70,455·8	508,584·7
72	35	63,192·4	438,128·9
73	36	56,339·2	374,936·5
74	37	49,904·5	318,597·3
75	38	43,896·1	268,692·8
76	39	38,320·4	224,796·7
77	40	33,182·2	186,476·3
78	41	28,483·1	153,294·1
79	42	24,221·8	124,811·0
80	43	20,392·9	100,589·2
81	44	16,986·7	80,196·3
82	45	13,989·1	63,209·6
83	46	11,381·7	49,220·5
84	47	9,141·67	37,838·80
85	48	7,242·85	28,697·13
86	49	5,655·94	21,454·28
87	50	4,349·60	15,798·34
88	51	3,291·30	11,448·74
89	52	2,448·34	8,157·44
90	53	1,788·82	5,709·10
91	54	1,282·46	3,920·28
92	55	899·943	2,637·815
93	56	617·991	1,737·872
94	57	414·846	1,119·881
95	58	271·926	705·035
96	59	173·850	433·109
97	60	108·276	259·259
98	61	65·6123	150·9831
99	62	38·6335	85·3708
100	63	22·0740	46·7373
101	64	12·2215	24·6633
102	65	6·5474	12·4418
103	66	3·3888	5·8944
104	67	1·6920	2·5056
105	68	·8136	·8136

Difference of Age 70 Years.

Ages x	Ages y	$D_{x,\ y}$	$N_{x,\ y}$
70	0	214,480	1,361,138
71	1	169,265	1,146,658
72	2	144,053	977,393
73	3	125,337	833,340
74	4	109,631	708,003
75	5	95,879·8	598,372·0
76	6	83,615·1	502,492·2
77	7	72,546·8	418,877·1
78	8	62,505·7	346,330·3
79	9	53,442·6	283,824·6
80	10	45,300·3	230,382·0
81	11	38,031·1	185,081·7
82	12	31,592·4	147,050·6
83	13	25,942·7	115,458·2
84	14	21,038·7	89,515·5
85	15	16,833·8	68,476·8
86	16	13,276·7	51,643·0
87	17	10,311·7	38,366·3
88	18	7,879·35	28,054·55
89	19	5,917·83	20,175·20
90	20	4,364·54	14,257·37
91	21	3,157·98	9,892·83
92	22	2,240·67	6,734·85
93	23	1,557·49	4,494·18
94	24	1,059·56	2,936·69
95	25	704·756	1,877·127
96	26	457·841	1,172·371
97	27	290·195	714·530
98	28	179·264	424·335
99	29	107·804	245·071
100	30	63·0414	137·2671
101	31	35·8058	74·2257
102	32	19·7288	38·4199
103	33	10·5326	18·6911
104	34	5·4415	8·1585
105	35	2·7170	2·7170

JOINT LIVES:—Two Females.

Difference of Age 38 Years.

Difference of Age 69 Years.

Difference of Age 38 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
38	0	760,815	10,203,313
39	1	631,312	9,442,498
40	2	567,782	8,811,186
41	3	524,952	8,243,404
42	4	490,856	7,718,452
43	5	461,896	7,227,596
44	6	436,462	6,765,700
45	7	413,435	6,329,238
46	8	392,074	5,915,803
47	9	372,208	5,523,729
48	10	353,597	5,151,521
49	11	336,043	4,797,924
50	12	319,387	4,461,881
51	13	303,499	4,142,494
52	14	288,279	3,838,995
53	15	273,645	3,550,716
54	16	259,539	3,277,071
55	17	245,541	3,017,532
56	18	231,859	2,771,991
57	19	218,495	2,540,132
58	20	205,457	2,321,637
59	21	192,753	2,116,180
60	22	180,483	1,923,427
61	23	168,639	1,742,944
62	24	157,213	1,574,305
63	25	146,197	1,417,092
64	26	135,585	1,270,895
65	27	125,369	1,135,310
66	28	115,545	1,009,941
67	29	106,112	894,396
68	30	97,068·5	788,284·0
69	31	88,417·7	691,215·5
70	32	80,163·5	602,797·8
71	33	72,312·0	522,634·3
72	34	64,870·6	450,322·3
73	35	57,847·8	385,451·7
74	36	51,252·2	327,603·9
75	37	45,091·9	276,351·7
76	38	39,373·8	231,259·8
77	39	34,102·8	191,886·0
78	40	29,281·0	157,783·2
79	41	24,907·2	128,502·2
80	42	20,976·0	103,595·0
81	43	17,477·7	82,619·0
82	44	14,398·0	65,141·3
83	45	11,718·3	50,743·3
84	46	9,415·40	39,024·95
85	47	7,462·51	29,609·55
86	48	5,829·77	22,147·04
87	49	4,485·14	16,317·27
88	50	3,395·34	11,832·13
89	51	2,526·91	8,436·79
90	52	1,847·12	5,909·88
91	53	1,324·93	4,062·76
92	54	931·670	2,737·825
93	55	640·632	1,806·155
94	56	430·645	1,165·523
95	57	282·700	734·878
96	58	181·025	452·178
97	59	112·940	271·153
98	60	68·5675	158·2131
99	61	40·4572	89·6456
100	62	23·1688	49·1884
101	63	12·8600	26·0196
102	64	6·9086	13·1596
103	65	3·5868	6·2510
104	66	1·7969	2·6642
105	67	·8673	·8673

Difference of Age 69 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
69	0	230,585	1,518,123
70	1	182,865	1,287,538
71	2	156,455	1,104,673
72	3	136,917	948,218
73	4	120,513	811,301
74	5	106,113	690,788
75	6	93,218·8	584,674·6
76	7	81,519·0	491,455·8
77	8	70,833·5	409,936·8
78	9	61,115·4	339,103·3
79	10	52,310·1	277,987·9
80	11	44,374·5	225,677·8
81	12	37,272·4	181,303·3
82	13	30,969·9	144,030·9
83	14	25,432·4	113,061·0
84	15	20,621·6	87,628·6
85	16	16,494·8	67,007·0
86	17	13,003·4	50,512·2
87	18	10,093·8	37,508·8
88	19	7,707·98	27,415·01
89	20	5,785·16	19,707·03
90	21	4,263·67	13,921·87
91	22	3,084·31	9,658·20
92	23	2,187·92	6,573·89
93	24	1,520·51	4,385·97
94	25	1,034·19	2,865·46
95	26	687·743	1,831·272
96	27	446·700	1,143·529
97	28	283·079	696·829
98	29	174·834	413·750
99	30	105·120	238·916
100	31	61·4599	133·7959
101	32	34·9007	72·3360
102	33	19·2263	37·4353
103	34	10·2622	18·2090
104	35	5·3007	7·9468
105	36	2·6461	2·6461

JOINT LIVES:—Two Females.

Difference of Age 39 Years.

Difference of Age 68 Years.

Difference of Age 39 Years.

Ages *x*	Ages *y*	$D_{x, y}$	$N_{x, y}$
39	0	740,461	9,818,707
40	1	614,270	9,078,246
41	2	552,310	8,463,976
42	3	510,507	7,911,666
43	4	477,212	7,401,159
44	5	448,921	6,923,947
45	6	424,065	6,475,026
46	7	401,558	6,050,961
47	8	380,676	5,649,403
48	9	361,252	5,268,727
49	10	343,053	4,907,475
50	11	325,888	4,564,422
51	12	309,599	4,238,534
52	13	294,063	3,928,935
53	14	279,180	3,634,872
54	15	264,873	3,355,692
55	16	250,701	3,090,819
56	17	236,863	2,840,118
57	18	223,353	2,603,255
58	19	210,168	2,379,902
59	20	197,313	2,169,734
60	21	184,794	1,972,421
61	22	172,704	1,787,627
62	23	161,037	1,614,923
63	24	149,784	1,453,886
64	25	138,939	1,304,102
65	26	128,495	1,165,163
66	27	118,450	1,036,668
67	28	108,800	918,218
68	29	99,547·0	809,417·6
69	30	90,692·8	709,870·6
70	31	82,242·3	619,177·8
71	32	74,201·9	536,935·5
72	33	66,579·6	462,733·6
73	34	59,384·2	396,154·0
74	35	52,624·6	336,769·8
75	36	46,309·6	284,145·2
76	37	40,446·4	237,835·6
77	38	35,040·2	197,389·2
78	39	30,093·4	162,349·0
79	40	25,604·9	132,255·6
80	41	21,569·5	106,650·7
81	42	17,977·4	85,081·2
82	43	14,814·2	67,103·8
83	44	12,060·9	52,289·6
84	45	9,693·89	40,228·71
85	46	7,685·96	30,534·82
86	47	6,006·57	22,848·86
87	48	4,622·98	16,842·29
88	49	3,501·15	12,219·31
89	50	2,606·79	8,718·16
90	51	1,906·39	6,111·37
91	52	1,368·11	4,204·98
92	53	962·525	2,836·866
93	54	663·217	1,874·341
94	55	446·422	1,211·124
95	56	293·466	764·702
96	57	188·197	471·236
97	58	117·601	283·039
98	59	71·5208	165·4377
99	60	42·2794	93·9169
100	61	24·2625	51·6375
101	62	13·4979	27·3750
102	63	7·2695	13·8771
103	64	3·7847	6·6076
104	65	1·9019	2·8229
105	66	·9210	·9210

Difference of Age 68 Years.

Ages *x*	Ages *y*	$D_{x, y}$	$N_{x, y}$
68	0	246,795	1,684,435
69	1	196,595	1,437,640
70	2	169,025	1,241,045
71	3	148,706	1,072,020
72	4	131,647	923,314
73	5	116,645	791,667
74	6	103,168	675,022
75	7	90,882·0	571,854·1
76	8	79,593·8	480,972·1
77	9	69,257·9	401,378·3
78	10	59,820·3	332,120·4
79	11	51,241·1	272,300·1
80	12	43,489·3	221,059·0
81	13	36,538·0	177,569·7
82	14	30,360·7	141,031·7
83	15	24,928·2	110,671·0
84	16	20,206·4	85,742·8
85	17	16,155·4	65,536·4
86	18	12,728·7	49,381·0
87	19	9,874·29	36,652·33
88	20	7,535·17	26,778·04
89	21	5,651·47	19,242·87
90	22	4,164·21	13,591·40
91	23	3,011·71	9,427·19
92	24	2,135·97	6,415·48
93	25	1,484·10	4,279·51
94	26	1,009·22	2,795·41
95	27	671·009	1,786·191
96	28	435·747	1,115·182
97	29	276·084	679·435
98	30	170·481	403·351
99	31	102·483	232·870
100	32	59·9064	130·3867
101	33	34·0118	70·4803
102	34	18·7328	36·4685
103	35	9·9967	17·7357
104	36	5·1624	7·7390
105	37	2·5766	2·5766

JOINT LIVES:—Two Females.

Difference of Age 40 Years.

Difference of Age 67 Years.

Difference of Age 40 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y		
40	0	720,472	9,441,476
41	1	597,531	8,721,004
42	2	537,112	8,123,473
43	3	496,316	7,586,361
44	4	463,806	7,090,045
45	5	436,171	6,626,239
46	6	411,883	6,190,068
47	7	389,883	5,778,185
48	8	369,471	5,388,302
49	9	350,481	5,018,831
50	10	332,686	4,668,350
51	11	315,901	4,335,664
52	12	299,973	4,019,763
53	13	284,782	3,719,790
54	14	270,231	3,435,008
55	15	255,853	3,164,777
56	16	241,841	2,908,924
57	17	228,174	2,667,083
58	18	214,841	2,438,909
59	19	201,838	2,224,068
60	20	189,165	2,022,230
61	21	176,829	1,833,065
62	22	164,919	1,656,236
63	23	153,427	1,491,317
64	24	142,347	1,337,890
65	25	131,674	1,195,543
66	26	121,404	1,063,869
67	27	111,535	942,465
68	28	102,069	830,930
69	29	93,008·5	728,861·2
70	30	84,358·6	635,852·7
71	31	76,126·2	551,494·1
72	32	68,319·7	475,367·9
73	33	60,948·6	407,048·2
74	34	54,022·2	346,099·6
75	35	47,549·7	292,077·4
76	36	41,538·6	244,527·7
77	37	35,994·7	202,989·1
78	38	30,920·6	166,994·4
79	39	26,315·3	136,073·8
80	40	22,173·7	109,758·5
81	41	18,486·1	87,584·8
82	42	15,237·8	69,098·7
83	43	12,409·5	53,860·9
84	44	9,977·26	41,451·35
85	45	7,913·29	31,474·09
86	46	6,186·43	23,560·80
87	47	4,763·19	17,374·37
88	48	3,608·75	12,611·18
89	49	2,688·02	9,002·43
90	50	1,966·66	6,314·41
91	51	1,412·01	4,347·75
92	52	993·894	2,935·739
93	53	685·182	1,941·845
94	54	462·161	1,256·663
95	55	304·218	794·502
96	56	195·365	490·284
97	57	122·261	294·919
98	58	74·4727	172·6576
99	59	44·1004	98·1849
100	60	25·3553	54·0845
101	61	14·1350	28·7292
102	62	7·6301	14·5942
103	63	3·9824	6·9641
104	64	2·0068	2·9817
105	65	·9749	·9749

Difference of Age 67 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y		
67	0	263,070	1,859,908
68	1	210,416	1,596,838
69	2	181,717	1,386,422
70	3	160,653	1,204,705
71	4	142,981	1,044,052
72	5	127,422	901,071
73	6	113,408	773,649
74	7	100,582	660,241
75	8	88,735·7	559,658·7
76	9	77,823·4	470,923·0
77	10	67,790·2	393,099·6
78	11	58,597·8	325,309·4
79	12	50,218·9	266,711 6
80	13	42,632·4	216,492·7
81	14	35,819·3	173,860·3
82	15	29,758·8	138,041·0
83	16	24,426·2	108,282·2
84	17	19,790·5	83,856·0
85	18	15,814·0	64,065·5
86	19	12,451·9	48,251·5
87	20	9,652·91	35,799·58
88	21	7,361·04	26,146·67
89	22	5,519·62	18,785·63
90	23	4,066·18	13,266·01
91	24	2,940·19	9,199·83
92	25	2,084·82	6,259·64
93	26	1,448·27	4,174·82
94	27	984·667	2,726·546
95	28	654·555	1,741·879
96	29	424·979	1,087·324
97	30	269·210	662·345
98	31	166·204	393·135
99	32	99·8927	226·9311
100	33	58·3806	127·0384
101	34	33·1388	68·6578
102	35	18·2481	35·5190
103	36	9·7360	17·2709
104	37	5·0267	7·5349
105	38	2·5082	2·5082

JOINT LIVES:—TWO FEMALES.

Difference of Age 41 Years.

Difference of Age 66 Years.

Difference of Age 41 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y		
41	0	700,839	9,071,521
42	1	581,089	8,370,682
43	2	522,182	7,789,593
44	3	482,374	7,267,411
45	4	450,633	6,785,037
46	5	423,640	6,334,404
47	6	399,908	5,910,764
48	7	378,407	5,510,856
49	8	358,454	5,132,449
50	9	339,889	4,773,995
51	10	322,492	4,434,106
52	11	306,079	4,111,614
53	12	290,506	3,805,535
54	13	275,653	3,515,029
55	14	261,028	3,239,376
56	15	246,811	2,978,348
57	16	232,969	2,731,537
58	17	219,478	2,498,568
59	18	206,325	2,279,090
60	19	193,503	2,072,765
61	20	181,013	1,879,262
62	21	168,858	1,698,249
63	22	157,126	1,529,391
64	23	145,809	1,372,265
65	24	134,904	1,226,456
66	25	124,407	1,091,552
67	26	114,317	967,145
68	27	104,635	852,828
69	28	95,365·0	748,192·6
70	29	86,512·6	652,827·6
71	30	78,085·1	566,315·0
72	31	70,091·4	488,229·9
73	32	62,541·6	418,138·5
74	33	55,445·4	355,596·9
75	34	48,812·5	300,151·5
76	35	42,650·9	251,339·0
77	36	36,966·7	208,688·1
78	37	31,762·9	171,721·4
79	38	27,038·6	139,958·5
80	39	22,788·9	112,919·9
81	40	19,003·9	90,131·0
82	41	15,668·9	71,127·1
83	42	12,764·3	55,458·2
84	43	10,265·6	42,693·9
85	44	8,144·62	32,428·28
86	45	6,369·41	24,283·66
87	46	4,905·81	17,914·25
88	47	3,718·20	13,008·44
89	48	2,770·63	9,290·24
90	49	2,027·94	6,519·61
91	50	1,456·65	4,491·67
92	51	1,025·79	3,035·02
93	52	707·512	2,009·234
94	53	477·467	1,301·722
95	54	314·943	824·255
96	55	202·522	509·312
97	56	126·917	306·790
98	57	77·4233	179·8733
99	58	45·9206	102·4500
100	59	26·4473	56·5294
101	60	14·7717	30·0821
102	61	7·9903	15·3104
103	62	4·1799	7·3201
104	63	2·1116	3·1402
105	64	1·0286	1·0286

Difference of Age 66 Years.

x	y	$D_{x, y}$	$N_{x, y}$
66	0	279,379	2,044,353
67	1	224,292	1,764,974
68	2	194,492	1,540,682
69	3	172,716	1,346,190
70	4	154,469	1,173,474
71	5	138,393	1,019,005
72	6	123,886	880,612
73	7	110,565	756,726
74	8	98,206·4	646,161·4
75	9	86,761·9	547,955·0
76	10	76,174·2	461,193·1
77	11	66,404·8	385,018·9
78	12	57,428·8	318,614·1
79	13	49,229·4	261,185·3
80	14	41,793·8	211,955·9
81	15	35,109·2	170,162·1
82	16	29,159·5	135,052·9
83	17	23,923·5	105,893·4
84	18	19,372·4	81,969·9
85	19	15,470·1	62,597·5
86	20	12,172·7	47,127·4
87	21	9,429·84	34,954·65
88	22	7,189·31	25,524·81
89	23	5,389·69	18,335·50
90	24	3,969·63	12,945·81
91	25	2,869·79	8,976·18
92	26	2,034·50	6,106·39
93	27	1,413·03	4,071·89
94	28	960·522	2,658·860
95	29	638·381	1,698·338
96	30	414·398	1,059·957
97	31	262·457	645·559
98	32	162·003	383·102
99	33	97·3484	221·0986
100	34	56·8820	123·7502
101	35	32·2815	66·8682
102	36	17·7722	34·5867
103	37	9·4800	16·8145
104	38	4·8934	7·3345
105	39	2·4411	2·4411

JOINT LIVES:—Two Females.

Difference of Age 42 Years.
Difference of Age 65 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 42 Years.**	
42	0	681,555	8,708,746
43	1	564,936	8,027,191
44	2	507,513	7,462,255
45	3	468,674	6,954,742
46	4	437,687	6,486,068
47	5	411,324	6,048,381
48	6	388,137	5,637,057
49	7	367,124	5,248,920
50	8	347,621	4,881,796
51	9	329,474	4,534,175
52	10	312,465	4,204,701
53	11	296,419	3,892,236
54	12	281,193	3,595,817
55	13	266,266	3,314,624
56	14	251,803	3,048,358
57	15	237,756	2,796,555
58	16	224,090	2,558,799
59	17	210,779	2,334,709
60	18	197,806	2,123,930
61	19	185,164	1,926,124
62	20	172,853	1,740,960
63	21	160,879	1,568,107
64	22	149,325	1,407,228
65	23	138,185	1,257,903
66	24	127,459	1,119,718
67	25	117,145	992,259
68	26	107,244	875,114
69	27	97,762·3	767,870·3
70	28	88,704·4	670,108·0
71	29	80,078·9	581,403·6
72	30	71,895·1	501,324·7
73	31	64,163·4	429,429·6
74	32	56,894·5	365,266·2
75	33	50,098·4	308,371·7
76	34	43,783·7	258,273·3
77	35	37,956·6	214,489·6
78	36	32,620·6	176,533·0
79	37	27,775·2	143,912·4
80	38	23,415·3	116,137·2
81	39	19,531·2	92,721·9
82	40	16,107·9	73,190·7
83	41	13,125·4	57,082·8
84	42	10,559·2	43,957·4
85	43	8,380·03	33,398·20
86	44	6,555·60	25,018·17
87	45	5,050·92	18,462·57
88	46	3,829·53	13,411·65
89	47	2,854·66	9,582·12
90	48	2,090·27	6,727·46
91	49	1,502·04	4,637·19
92	50	1,058·22	3,135·15
93	51	730·216	2,076·930
94	52	493·027	1,346·714
95	53	325·373	853·687
96	54	209·662	528·314
97	55	131·567	318·652
98	56	80·3719	187·0850
99	57	47·7400	106·7131
100	58	27·5389	58·9731
101	59	15·4079	31·4342
102	60	8·3502	16·0263
103	61	4·3773	7·6761
104	62	2·2164	3·2988
105	63	1·0824	1·0824

Difference of Age 65 Years.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
65	0	295,698	2,237,569
66	1	238,196	1,941,871
67	2	207,317	1,703,675
68	3	184,858	1,496,358
69	4	166,068	1,311,500
70	5	149,512	1,145,432
71	6	134,552	995,920
72	7	120,780	861,368
73	8	107,954	740,588
74	9	96,022·0	632,634·4
75	10	84,923·3	536,612·4
76	11	74,617·5	451,689·1
77	12	65,080·1	377,071·6
78	13	56,297·3	311,991·5
79	14	48,261·1	255,694·2
80	15	40,965·3	207,433·1
81	16	34,402·2	166,467·8
82	17	28,559·4	132,065·6
83	18	23,418·0	103,506·2
84	19	18,951·1	80,088·2
85	20	15,123·3	61,137·1
86	21	11,891·4	46,013·8
87	22	9,209·85	34,122·44
88	23	7,020·07	24,912·59
89	24	5,261·71	17,892·52
90	25	3,874·58	12,630·81
91	26	2,800·51	8,756·23
92	27	1,984·99	5,955·72
93	28	1,378·38	3,970·73
94	29	936·788	2,592·349
95	30	622·487	1,655·561
96	31	404·003	1,033·074
97	32	255·823	629·071
98	33	157·877	373·248
99	34	94·8496	215·3709
100	35	55·4105	120·5213
101	36	31·4396	65·1108
102	37	17·3049	33·6712
103	38	9·2286	16·3663
104	39	4·7625	7·1377
105	40	2·3752	2·3752

JOINT LIVES:—TWO FEMALES.

Difference of Age 43 Years.

Difference of Age 64 Years.

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
		Difference of Age 43 Years.	
43	0	662,609	8,353,053
44	1	549,066	7,690,444
45	2	493,099	7,141,378
46	3	455,209	6,648,279
47	4	424,962	6,193,070
48	5	399,217	5,768,108
49	6	376,564	5,368,891
50	7	356,030	4,992,327
51	8	336,969	4,636,297
52	9	319,230	4,299,328
53	10	302,603	3,980,098
54	11	286,917	3,677,495
55	12	271,617	3,390,578
56	13	256,855	3,118,961
57	14	242,565	2,862,106
58	15	228,695	2,619,541
59	16	215,208	2,390,846
60	17	202,075	2,175,638
61	18	189,281	1,973,563
62	19	176,817	1,784,282
63	20	164,685	1,607,465
64	21	152,891	1,442,780
65	22	141,517	1,289,889
66	23	130,559	1,148,372
67	24	120,018	1,017,813
68	25	109,897	897,795
69	26	100,200	787,898
70	27	90,934·3	687,697·9
71	28	82,107·7	596,763·6
72	29	73,730·8	514,655·9
73	30	65,814·5	440,925·1
74	31	58,370·0	375,110·6
75	32	51,407·8	316,740·6
76	33	44,937·1	265,332·8
77	34	38,964·7	220,395·7
78	35	33,494·2	181,431·0
79	36	28,525·3	147,936·8
80	37	24,053·2	119,411·5
81	38	20,068·0	95,358·3
82	39	16,554·8	75,290·3
83	40	13,493·1	58,735·5
84	41	10,857·9	45,242·4
85	42	8,619·63	34,384·50
86	43	6,745·08	25,764·87
87	44	5,198·57	19,019·79
88	45	3,942·80	13,821·22
89	46	2,940·14	9,878·42
90	47	2,153·66	6,938·28
91	48	1,548·20	4,784·62
92	49	1,091·19	3,236·42
93	50	753·300	2,145·226
94	51	508·848	1,391·926
95	52	335·977	883·078
96	53	216·606	547·101
97	54	136·205	330·495
98	55	83·3165	194·2897
99	56	49·5581	110·9732
100	57	28·6300	61·4151
101	58	16·0438	32·7851
102	59	8·7098	16·7413
103	60	4·5744	8·0315
104	61	2·3210	3·4571
105	62	1·1361	1·1361

Ages x	Ages y	$D_{x,y}$	$N_{x,y}$
		Difference of Age 64 Years.	
64	0	312,013	2,439,355
65	1	252,110	2,127,342
66	2	220,170	1,875,232
67	3	197,048	1,655,062
68	4	177,742	1,458,014
69	5	160,738	1,280,272
70	6	145,362	1,119,534
71	7	131,179	974,172
72	8	117,928	842,993
73	9	105,553	725,065
74	10	93,987·1	619,512·3
75	11	83,187·8	525,525·2
76	12	73,129·0	442,337·4
77	13	63,797·9	369,208·4
78	14	55,189·9	305,410·5
79	15	47,304·3	250,220·6
80	16	40,140 3	202,916·3
81	17	33,694·1	162,776·0
82	18	27,956·0	129,081·9
83	19	22,908·7	101,125·9
84	20	18,526·2	78,217·2
85	21	14,773·8	59,691·0
86	22	11,614·0	44,917·2
87	23	8,993·05	33,303·20
88	24	6,853·38	24,310·15
89	25	5,135·72	17,456·77
90	26	3,781·04	12,321·05
91	27	2,732·37	8,540·01
92	28	1,936·32	5,807·64
93	29	1,344·32	3,871·32
94	30	913·464	2,527·003
95	31	606·871	1,613·539
96	32	393·791	1,006·668
97	33	249·307	612·877
98	34	153·824	363·570
99	35	92·3958	209·7462
100	36	53·9654	117·3504
101	37	30·6129	63·3850
102	38	16·8460	32·7721
103	39	8·9817	15·9261
104	40	4·6339	6·9444
105	41	2·3105	2·3105

JOINT LIVES:—TWO FEMALES.

Difference of Age 44 Years.

Difference of Age 63 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 44 Years.**	
44	0	643,996	8,004,359
45	1	533,472	7,360,363
46	2	478,933	6,826,891
47	3	441,975	6,347,958
48	4	412,453	5,905,983
49	5	387,313	5,493,530
50	6	365,184	5,106,217
51	7	345,119	4,741,033
52	8	326,492	4,395,914
53	9	309,154	4,069,422
54	10	292,902	3,760,268
55	11	277,146	3,467,366
56	12	262,018	3,190,220
57	13	247,432	2,928,202
58	14	233,321	2,680,770
59	15	219,630	2,447,449
60	16	206,321	2,227,819
61	17	193,366	2,021,498
62	18	180,748	1,828,132
63	19	168,462	1,647,384
64	20	156,508	1,478,922
65	21	144,897	1,322,414
66	22	133,706	1,177,517
67	23	122,938	1,043,811
68	24	112,593	920,873
69	25	102,679	808,280
70	26	93,202·1	705,600·5
71	27	84,171·7	612,398·4
72	28	75,598·8	528,226·7
73	29	67,494·9	452,627·9
74	30	59,871·9	385,133·0
75	31	52,740·9	325,261·1
76	32	46,111·6	272,520·2
77	33	39,991·2	226,408·6
78	34	34,383·7	186,417·4
79	35	29,289·1	152,033·7
80	36	24,702·7	122,744·6
81	37	20,614·7	98,041·9
82	38	17,009·8	77,427·2
83	39	13,867·5	60,417·4
84	40	11,162·1	46,549·9
85	41	8,863·52	35,387·81
86	42	6,937·94	26,524·29
87	43	5,348·82	19,586·35
88	44	4,058·06	14,237·53
89	45	3,027·10	10,179·47
90	46	2,218·15	7,152·37
91	47	1,595·16	4,934·22
92	48	1,124·73	3,339·06
93	49	776·774	2,214·330
94	50	524·934	1,437·556
95	51	346·758	912·622
96	52	223·665	565·864
97	53	140·716	342·199
98	54	86·2537	201·4831
99	55	51·3737	115·2294
100	56	29·7203	63·8557
101	57	16·6795	34·1354
102	58	9·0693	17·4559
103	59	4·7714	8·3866
104	60	2·4255	3·6152
105	61	1·1897	1·1897

Difference of Age 63 Years.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
63	0	328,314	2,649,504
64	1	266,020	2,321,190
65	2	233,030	2,055,170
66	3	209,264	1,822,140
67	4	189,463	1,612,876
68	5	172,038	1,423,413
69	6	156,277	1,251,375
70	7	141,718	1,095,098
71	8	128,081	953,380
72	9	115,305	825,299
73	10	103,316	709,994
74	11	92,066·4	606,677·8
75	12	81,528·3	514,611·4
76	13	71,688·1	433,083·1
77	14	62,543·0	361,395·0
78	15	54,095·8	298,852·0
79	16	46,351·7	244,756·2
80	17	39,314·2	198,404·5
81	18	32,982·3	159,090·3
82	19	27,348·0	126,108·0
83	20	22,395·1	98,760·0
84	21	18,098·1	76,364·9
85	22	14,429·1	58,266·8
86	23	11,340·6	43,837·7
87	24	8,779·51	32,497·07
88	25	6,689·27	23,717·56
89	26	5,011·74	17,028·29
90	27	3,689·04	12,016·55
91	28	2,665·37	8,327·51
92	29	1,888·47	5,662·14
93	30	1,310·85	3,773·67
94	31	890·548	2,462·815
95	32	591·531	1,572·267
96	33	383·761	980·736
97	34	242·907	596·975
98	35	149·845	354·068
99	36	89·9862	204·2228
100	37	52·5463	114·2366
101	38	29·8011	61·6903
102	39	16·3953	31·8892
103	40	8·7393	15·4939
104	41	4·5077	6·7546
105	42	2·2469	2·2469

JOINT LIVES:—TWO FEMALES.

Difference of Age 45 Years.

Difference of Age 62 Years.

Ages x	Ages y	$D_{x, y}$	$N_{x, y}$
		Difference of Age 45 Years.	
45	0	625,705	7,662,582
46	1	518,146	7,036,877
47	2	465,009	6,518,731
48	3	428,966	6,053,722
49	4	400,155	5,624,756
50	5	375,609	5,224,601
51	6	353,993	4,848,992
52	7	334,389	4,494,999
53	8	316,187	4,160,610
54	9	299,244	3,844,423
55	10	282,928	3,545,179
56	11	267,351	3,262,251
57	12	252,405	2,994,900
58	13	238,003	2,742,495
59	14	224,073	2,504,492
60	15	210,561	2,280,419
61	16	197,429	2,069,858
62	17	184,649	1,872,429
63	18	172,207	1,687,780
64	19	160,097	1,515,573
65	20	148,325	1,355,476
66	21	136,900	1,207,151
67	22	125,901	1,070,251
68	23	115,332	944,350
69	24	105,198	829,018
70	25	95,507·7	723,819·9
71	26	86,270·9	628,312·2
72	27	77,499·2	542,041·3
73	28	69,205·0	464,542·1
74	29	61,400·7	395,337·1
75	30	54,098·1	333,936·4
76	31	47,307·4	279,838·3
77	32	41,036·4	232,530·9
78	33	35,289·5	191,494·5
79	34	30,067·0	156,205·0
80	35	25,364·2	126,138·0
81	36	21,171·4	100,773·8
82	37	17,473·2	79,602·4
83	38	14,248·7	62,129·2
84	39	11,471·8	47,880·5
85	40	9,111·82	36,408·68
86	41	7,134·25	27,296·86
87	42	5,501·76	20,162·61
88	43	4,175·35	14,660·85
89	44	3,115·59	10,485·50
90	45	2,283·76	7,369·91
91	46	1,642·92	5,086·15
92	47	1,158·84	3,443·23
93	48	800·647	2,284·392
94	49	541·292	1,483·745
95	50	357·720	942·453
96	51	230·842	584·733
97	52	145·302	353·891
98	53	89·1103	208·5894
99	54	53·1849	119·4791
100	55	30·8092	66·2942
101	56	17·3147	35·4850
102	57	9·4286	18·1703
103	58	4·9684	8·7417
104	59	2·5300	3·7733
105	60	1·2433	1·2433
		Difference of Age 62 Years.	
62	0	344,597	2,867,811
63	1	279,918	2,523,214
64	2	245,887	2,243,296
65	3	221,488	1,997,409
66	4	201,209	1,775,921
67	5	183,383	1,574,712
68	6	167,263	1,391,329
69	7	152,359	1,224,066
70	8	138,371	1,071,707
71	9	125,232	933,336
72	10	112,861	808,104
73	11	101,204	695,243
74	12	90,229·8	594,038·9
75	13	79,921·9	503,809·1
76	14	70,278·0	423,887·2
77	15	61,303·1	353,609·2
78	16	53,006·5	292,306·1
79	17	45,397·8	239,299·6
80	18	38,483·6	193,901·8
81	19	32,264·9	155,418·2
82	20	26,734·9	123,153·3
83	21	21,877·6	96,418·4
84	22	17,675·9	74,540·8
85	23	14,089·5	56,864·9
86	24	11,071·3	42,775·4
87	25	8,569·28	31,704·14
88	26	6,527·79	23,134·86
89	27	4,889·79	16,607·07
90	28	3,598·58	11,717·28
91	29	2,599·51	8,118·70
92	30	1,841·45	5,519·19
93	31	1,277·97	3,677·74
94	32	868·038	2,399·771
95	33	576·464	1,531·733
96	34	373·910	955·269
97	35	236·623	581·359
98	36	145·937	344·736
99	37	87·6200	198·7986
100	38	51·1529	111·1786
101	39	29·0038	60·0257
102	40	15·9527	31·0219
103	41	8·5011	15·0692
104	42	4·3836	6·5681
105	43	2·1845	2·1845

JOINT LIVES:—Two Females.

Difference of Age 46 Years.

Difference of Age 61 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Difference of Age 46 Years.**	
46	0	607,729	7,327,638
47	1	503,082	6,719,909
48	2	451,321	6,216,827
49	3	416,175	5,765,506
50	4	388,063	5,349,331
51	5	364,098	4,961,268
52	6	342,987	4,597,170
53	7	323,835	4,254,183
54	8	306,051	3,930,348
55	9	289,054	3,624,297
56	10	272,929	3,335,243
57	11	257,543	3,062,314
58	12	242,786	2,804,771
59	13	228,569	2,561,985
60	14	214,820	2,333,416
61	15	201,486	2,118,596
62	16	188,529	1,917,110
63	17	175,924	1,728,581
64	18	163,657	1,552,657
65	19	151,726	1,389,000
66	20	140,139	1,237,274
67	21	128,909	1,097,135
68	22	118,112	968,226
69	23	107,757	850,114
70	24	97,850·7	742,356·9
71	25	88,405·0	644,506·2
72	26	79,432·0	556,101·2
73	27	70,944·6	476,669·2
74	28	62,956·3	405,724·6
75	29	55,479·4	342,768·3
76	30	48,524·7	287,288·9
77	31	42,100·6	238,764·2
78	32	36,211·9	196,663·6
79	33	30,859·1	160,451·7
80	34	26,037·8	129,592·6
81	35	21,738·3	103,554·8
82	36	17,945·0	81,816·5
83	37	14,636·8	63,871·5
84	38	11,787·1	49,234·7
85	39	9,364·62	37,447·62
86	40	7,334·11	28,083·00
87	41	5,657·43	20,748·89
88	42	4,294·73	15,091·46
89	43	3,205·64	10,796·73
90	44	2,350·52	7,591·09
91	45	1,691·51	5,240·57
92	46	1,193·54	3,549·06
93	47	824·929	2,355·519
94	48	557·928	1,530·590
95	49	368·868	972·662
96	50	238·140	603·794
97	51	149·965	365·654
98	52	92·0145	215·6894
99	53	54·9463	123·6749
100	54	31·8954	68·7286
101	55	17·9491	36·8332
102	56	9·7877	18·8841
103	57	5·1652	9·0964
104	58	2·6344	3·9312
105	59	1·2968	1·2968

Difference of Age 61 Years.

x	y	$D_{x, y}$	$N_{x, y}$
61	0	360,864	3,094,083
62	1	293,801	2,733,219
63	2	258,734	2,439,418
64	3	233,708	2,180,684
65	4	212,962	1,946,976
66	5	194,751	1,734,014
67	6	178,293	1,539,263
68	7	163,070	1,360,970
69	8	148,761	1,197,900
70	9	135,293	1,049,139
71	10	122,578	913,846
72	11	110,555	791,268
73	12	99,185·4	680,712·5
74	13	88,452·0	581,527·1
75	14	78,349·8	493,075·1
76	15	68,884·7	414,725·3
77	16	60,068·6	345,840·6
78	17	51,915·5	285,772·0
79	18	44,438·6	233,856·5
80	19	37,646·6	189,417·9
81	20	31,541·6	151,771·3
82	21	26,117·1	120,229·7
83	22	21,367·2	94,112·6
84	23	17,259·8	72,745·4
85	24	13,754·9	55,485·6
86	25	10,806·2	41,730·7
87	26	8,362·42	30,924·50
88	27	6,368·96	22,562·08
89	28	4,769·89	16,193·12
90	29	3,509·66	11,423·23
91	30	2,534·78	7,913·57
92	31	1,795·26	5,378·79
93	32	1,245·67	3,583·53
94	33	845·928	2,337·856
95	34	561·667	1,491·928
96	35	364·237	930·261
97	36	230·452	566·024
98	37	142·100	335·572
99	38	85·2964	193·4718
100	39	49·7844	108·1754
101	40	28·2209	58·3910
102	41	15·5180	30·1701
103	42	8·2672	14·6521
104	43	4·2618	6·3849
105	44	2·1231	2·1231

JOINT LIVES:—Two Females.

Difference of Age 47 Years.

Difference of Age 60 Years.

Difference of Age 47 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
47	0	590,061	6,999,456
48	1	488,274	6,409,395
49	2	437,864	5,921,121
50	3	403,598	5,483,257
51	4	376,171	5,079,659
52	5	352,778	4,703,488
53	6	332,162	4,350,710
54	7	313,454	4,018,548
55	8	295,629	3,705,094
56	9	278,838	3,409,465
57	10	262,916	3,130,627
58	11	247,728	2,867,711
59	12	233,163	2,619,983
60	13	219,131	2,386,820
61	14	205,562	2,167,689
62	15	192,404	1,962,127
63	16	179,620	1,769,723
64	17	167,189	1,590,103
65	18	155,100	1,422,914
66	19	143,353	1,267,814
67	20	131,958	1,124,461
68	21	120,934	992,503
69	22	110,355	871,569
70	23	100,231	761,214
71	24	90,573·8	660,983·2
72	25	81,396·9	570,409·4
73	26	72,714·0	489,012·5
74	27	64,538·9	416,298·5
75	28	56,885·0	351,759·6
76	29	49,763·7	294,874·6
77	30	43,183·9	245,110·9
78	31	37,150·9	201,927·0
79	32	31,665·6	164,776·1
80	33	26,723·8	133,110·5
81	34	22,315·7	106,386·7
82	35	18,425·6	84,071·0
83	36	15,032·1	65,645·4
84	37	12,108·2	50,613·3
85	38	9,622·02	38,505·10
86	39	7,537·58	28,883·08
87	40	5,815·91	21,345·50
88	41	4,416·25	15,529·59
89	42	3,297·30	11,113·34
90	43	2,418·46	7,816·04
91	44	1,740·96	5,397·58
92	45	1,228·84	3,656·62
93	46	849·630	2,427·784
94	47	574·849	1,578·154
95	48	380·204	1,003·305
96	49	245·561	623·101
97	50	154·705	377·540
98	51	94·9671	222·8350
99	52	56·7370	127·8679
100	53	32·9517	71·1309
101	54	18·5819	38·1792
102	55	10·1463	19·5973
103	56	5·3619	9·4510
104	57	2·7388	4·0891
105	58	1·3503	1·3503

Difference of Age 60 Years.

Ages x	Ages y	$D_{x,\,y}$	$N_{x,\,y}$
60	0	377,118	3,328,127
61	1	307,670	2,951,009
62	2	271,566	2,643,339
63	3	245,918	2,371,773
64	4	224,712	2,125,855
65	5	206,127	1,901,143
66	6	189,346	1,695,016
67	7	173,824	1,505,670
68	8	159,219	1,331,846
69	9	145,452	1,172,627
70	10	132,426	1,027,175
71	11	120,073	894,749
72	12	108,349	774,676
73	13	97,231·2	666,326·7
74	14	86,712·1	569,095·5
75	15	76,796·6	482,383·4
76	16	67,497·6	405,586·8
77	17	58,832·3	338,089·2
78	18	50,818·7	279,256·9
79	19	43,472·1	228,438·2
80	20	36,802·6	184,966·1
81	21	30,812·7	148,163·5
82	22	25,507·8	117,350·8
83	23	20,864·2	91,843·0
84	24	16,849·9	70,978·8
85	25	13,425·5	54,128·9
86	26	10,545·3	40,703·4
87	27	8,158·94	30,158·09
88	28	6,212·78	21,999·15
89	29	4,652·03	15,786·37
90	30	3,422·28	11,134·34
91	31	2,471·19	7,712·06
92	32	1,749·88	5,240·87
93	33	1,213·94	3,490·99
94	34	824·215	2,277·053
95	35	547·137	1,452·838
96	36	354·738	905·701
97	37	224·392	550·963
98	38	138·331	326·571
99	39	83·0145	188·2400
100	40	48·4405	105·2255
101	41	27·4518	56·7850
102	42	15·0910	29·3332
103	43	8·0374	14·2422
104	44	4·1420	6·2048
105	45	2·0628	2·0628

JOINT LIVES:—Two Females.

Difference of Age 48 Years.

Difference of Age 59 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 48 Years.**	
48	0	572,693	6,677,953
49	1	473,715	6,105,260
50	2	424,632	5,631,545
51	3	391,230	5,206,913
52	4	364,475	4,815,683
53	5	341,644	4,451,208
54	6	321,514	4,109,564
55	7	302,780	3,788,050
56	8	285,181	3,485,270
57	9	268,608	3,200,089
58	10	252,896	2,931,481
59	11	237,909	2,678,585
60	12	223,535	2,440,676
61	13	209,686	2,217,141
62	14	196,295	2,007,455
63	15	183,312	1,811,160
64	16	170,702	1,627,848
65	17	158,447	1,457,146
66	18	146,540	1,298,699
67	19	134,984	1,152,159
68	20	123,794	1,017,175
69	21	112,990	893,381
70	22	102,647	780,391
71	23	92,776·9	677,743·6
72	24	83,393·8	584,966·7
73	25	74,512·7	501,572·9
74	26	66,148·4	427,060·2
75	27	58,315·0	360,911·8
76	28	51,024·5	302,596·8
77	29	44,286·6	251,572·3
78	30	38,106·9	207,285·7
79	31	32,486·8	169,178·8
80	32	27,422·2	136,692·0
81	33	22,903·5	109,269·8
82	34	18,914·9	86,366·3
83	35	15,434·6	67,451·4
84	36	12,435·2	52,016·8
85	37	9,884·14	39,581·64
86	38	7,744·77	29,697·50
87	39	5,977·27	21,952·73
88	40	4,539·97	15,975·46
89	41	3,390·60	11,435·49
90	42	2,487·60	8,044·89
91	43	1,791·28	5,557·29
92	44	1,264·76	3,766·01
93	45	874·760	2,501·250
94	46	592·062	1,626·490
95	47	391·735	1,034·428
96	48	253·108	642·693
97	49	159·526	389·585
98	50	97·9693	230·0591
99	51	58·5576	132·0898
100	52	34·0256	73·5322
101	53	19·1973	39·5066
102	54	10·5040	20·3093
103	55	5·5584	9·8053
104	56	2·8431	4·2469
105	57	1·4038	1·4038

Difference of Age 59 Years.

x	y	$D_{x,\,y}$	$N_{x,\,y}$
59	0	393,360	3,569,760
60	1	321,528	3,176,400
61	2	284,386	2,854,872
62	3	258,115	2,570,486
63	4	236,452	2,312,371
64	5	217,500	2,075,919
65	6	200,407	1,858,419
66	7	184,600	1,658,012
67	8	169,719	1,473,412
68	9	155,677	1,303,693
69	10	142,370	1,148,016
70	11	129,720	1,005,646
71	12	117,678	875,926
72	13	106,214	758,248
73	14	95,318·6	652,034·1
74	15	84,993·1	556,715·5
75	16	75,250·1	471,722·4
76	17	66,108·4	396,472·3
77	18	57,589·4	330,363·9
78	19	49,713·4	272,774·5
79	20	42,497·5	223,061·1
80	21	35,952·1	180,563·6
81	22	30,093·9	144,611·5
82	23	24,907·3	114,517·6
83	24	20,368·8	89,610·3
84	25	16,446·4	69,241·5
85	26	13,101·4	52,795·1
86	27	10,288·8	39,693·7
87	28	7,958·87	29,404·91
88	29	6,059·26	21,446·04
89	30	4,536·20	15,386·78
90	31	3,336·42	10,850·58
91	32	2,408·73	7,514·16
92	33	1,705·31	5,105·43
93	34	1,182·78	3,400·12
94	35	802·892	2,217·344
95	36	532·868	1,414·452
96	37	345·410	881·584
97	38	218·442	536·174
98	39	134·631	317·732
99	40	80·7735	183·1014
100	41	47·1205	102·3279
101	42	26·6964	55·2074
102	43	14·6715	28·5110
103	44	7·8116	13·8395
104	45	4·0244	6·0279
105	46	2·0035	2·0035

JOINT LIVES:—TWO FEMALES.

Difference of Age 49 Years.

Difference of Age 58 Years.

Difference of Age 49 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y		
49	0	555,616	6,363,069
50	1	459,399	5,807,453
51	2	411,619	5,348,054
52	3	379,067	4,936,435
53	4	352,972	4,557,368
54	5	330,692	4,204,396
55	6	310,565	3,873,704
56	7	292,079	3,563,139
57	8	274,719	3,271,060
58	9	258,372	2,996,341
59	10	242,872	2,737,969
60	11	228,085	2,495,097
61	12	213,901	2,267,012
62	13	200,234	2,053,111
63	14	187,019	1,852,877
64	15	174,210	1,665,858
65	16	161,777	1,491,648
66	17	149,703	1,329,871
67	18	137,985	1,180,168
68	19	126,633	1,042,183
69	20	115,663	915,550
70	21	105,099	799,887
71	22	95,013·5	694,788·1
72	23	85,422·2	599,774·6
73	24	76,340·7	514,352·4
74	25	67,784·8	438,011·7
75	26	59,769·3	370,226·9
76	27	52,307·2	310,457·6
77	28	45,408·6	258,150·4
78	29	39,079·9	212,741·8
79	30	33,322·7	173,661·9
80	31	28,133·4	140,339·2
81	32	23,502·2	112,205·8
82	33	19,413·2	88,703·6
83	34	15,844·5	69,290·4
84	35	12,768·2	53,445·9
85	36	10,151·1	40,677·7
86	37	7,955·75	30,526·60
87	38	6,141·57	22,570·85
88	39	4,665·92	16,429·28
89	40	3,485·58	11,763·36
90	41	2,557·99	8,277·78
91	42	1,842·50	5,719·79
92	43	1,301·32	3,877·29
93	44	900·331	2,575·965
94	45	609·574	1,675·634
95	46	403·465	1,066·060
96	47	260·784	662·595
97	48	164·429	401·811
98	49	101·022	237·382
99	50	60·4088	136·3599
100	51	35·1174	75·9511
101	52	19·8229	40·8337
102	53	10·8519	21·0108
103	54	5·7543	10·1589
104	55	2·9473	4·4046
105	56	1·4573	1·4573

Difference of Age 58 Years.

Ages		$D_{x, y}$	$N_{x, y}$
x	y		
58	0	409,596	3,818,797
59	1	335,376	3,409,201
60	2	297,195	3,073,825
61	3	270,299	2,776,630
62	4	248,179	2,506,331
63	5	228,863	2,258,152
64	6	211,464	2,029,289
65	7	195,383	1,817,825
66	8	180,240	1,622,442
67	9	165,944	1,442,202
68	10	152,378	1,276,258
69	11	139,460	1,123,880
70	12	127,132	984,420
71	13	115,359	857,288
72	14	104,125	741,929
73	15	93,429·0	637,803·8
74	16	83,281·5	544,374·8
75	17	73,701·4	461,093·3
76	18	64,711·7	387,391·9
77	19	56,336·8	322,680·2
78	20	48,598·9	266,343·4
79	21	41,515·4	217,744·5
80	22	35,113·4	176,229·1
81	23	29,385·4	141,115·7
82	24	24,315·9	111,730·3
83	25	19,881·0	87,414·4
84	26	16,049·4	67,533·4
85	27	12,782·6	51,484·0
86	28	10,036·5	38,701·4
87	29	7,762·21	28,664·90
88	30	5,908·40	20,902·69
89	31	4,422·40	14,994·29
90	32	3,252·09	10,571·89
91	33	2,347·38	7,319·80
92	34	1,661·53	4,972·42
93	35	1,152·18	3,310·89
94	36	781·953	2,158·707
95	37	518·856	1,376·754
96	38	336·250	857·898
97	39	212·598	521·648
98	40	130·996	309·050
99	41	78·5725	178·0540
100	42	45·8239	99·4815
101	43	25·9544	53·6576
102	44	14·2594	27·7032
103	45	7·5897	13·4438
104	46	3·9088	5·8541
105	47	1·9453	1·9453

JOINT LIVES:—Two Females.

Difference of Age 50 Years.

Difference of Age 51 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	Difference of Age 50 Years.		x	y	Difference of Age 51 Years.	
50	0	538,826	6,054,731	51	0	522,314	5,752,870
51	1	445,321	5,515,905	52	1	431,476	5,230,556
52	2	398,822	5,070,584	53	2	386,234	4,799,080
53	3	367,103	4,671,762	54	3	355,334	4,412,846
54	4	341,657	4,304,659	55	4	330,022	4,057,512
55	5	319,430	3,963,002	56	5	308,141	3,727,490
56	6	299,589	3,643,572	57	6	288,598	3,419,349
57	7	281,364	3,343,983	58	7	270,641	3,130,751
58	8	264,249	3,062,619	59	8	253,775	2,860,110
59	9	248,130	2,798,370	60	9	237,884	2,606,335
60	10	232,843	2,550,240	61	10	222,808	2,368,451
61	11	218,255	2,317,397	62	11	208,416	2,145,643
62	12	204,258	2,099,142	63	12	194,606	1,937,227
63	13	190,772	1,894,884	64	13	181,300	1,742,621
64	14	177,734	1,704,112	65	14	168,441	1,561,321
65	15	165,101	1,526,378	66	15	155,989	1,392,880
66	16	152,848	1,361,277	67	16	143,926	1,236,891
67	17	140,964	1,208,429	68	17	132,243	1,092,965
68	18	129,449	1,067,465	69	18	120,946	960,722
69	19	118,316	938,016	70	19	110,052	839,776
70	20	107,585	819,700	71	20	99,584·3	729,723·9
71	21	97,283·0	712,115·1	72	21	89,571·1	630,139·6
72	22	87,481·5	614,832·1	73	22	80,082·7	540,568·5
73	23	78,197·5	527,350·6	74	23	71,136·9	460,485·8
74	24	69,447·7	449,153·1	75	24	62,750·4	389,348·9
75	25	61,247·8	379,705·4	76	25	54,937·9	326,598·5
76	26	53,611·6	318,457·6	77	26	47,711·0	271,660·6
77	27	46,550·1	264,846·0	78	27	41,077·3	223,949·6
78	28	40,070·0	218,295·9	79	28	35,039·4	182,872·3
79	29	34,173·6	178,225·9	80	29	29,594·1	147,832·9
80	30	28,857·3	144,052·3	81	30	24,732·1	118,238·8
81	31	24,111·6	115,195·0	82	31	20,437·2	93,506·7
82	32	19,920·6	91,083·4	83	32	16,687·0	73,069·5
83	33	16,261·9	71,162·8	84	33	13,452·6	56,382·5
84	34	13,107·3	54,900·9	85	34	10,699·7	42,929·9
85	35	10,422·9	41,793·6	86	35	8,389·39	32,230·20
86	36	8,170·60	31,370·71	87	36	6,479·25	23,840·81
87	37	6,308·88	23,200·11	88	37	4,924·78	17,361·56
88	38	4,794·18	16,891·23	89	38	3,680·75	12,436·78
89	39	3,582·28	12,097·05	90	39	2,702·61	8,756·03
90	40	2,629·65	8,514·77	91	40	1,947·71	6,053·42
91	41	1,894·63	5,885·12	92	41	1,376·40	4,105·71
92	42	1,338·52	3,990·49	93	42	952·840	2,729·307
93	43	926·354	2,651·970	94	43	645·527	1,776·467
94	44	627·393	1,725·616	95	44	427·541	1,130·940
95	45	415·398	1,098·223	96	45	276·537	703·399
96	46	268·592	682·825	97	46	174·489	426·862
97	47	169·416	414·233	98	47	107·285	252·373
98	48	104·127	244·817	99	48	64·2057	145·0879
99	49	62·2912	140·6901	100	49	37·3565	80·8822
100	50	36·2276	78·3989	101	50	21·1058	43·5257
101	51	20·4590	42·1713	102	51	11·5651	22·4199
102	52	11·2055	21·7123	103	52	6·1386	10·8548
103	53	5·9449	10·5068	104	53	3·1522	4·7162
104	54	3·0512	4·5619	105	54	1·5640	1·5640
105	55	1·5107	1·5107				

JOINT LIVES:—Two Females.

Difference of Age 52 Years.

Difference of Age 53 Years.

Ages		$D_{x, y}$	$N_{x, y}$	Ages		$D_{x, y}$	$N_{x, y}$
x	y	**Difference of Age 52 Years.**		x	y	**Difference of Age 53 Years.**	
52	0	506,075	5,457,418	53	0	490,102	5,168,295
53	1	417,857	4,951,343	54	1	404,462	4,678,193
54	2	373,853	4,533,486	55	2	361,122	4,273,731
55	3	343,234	4,159,633	56	3	331,103	3,912,609
56	4	318,358	3,816,399	57	4	306,679	3,581,506
57	5	296,836	3,498,041	58	5	285,524	3,274,827
58	6	277,600	3,201,205	59	6	266,596	2,989,303
59	7	259,913	2,923,605	60	7	249,181	2,722,707
60	8	243,296	2,663,692	61	8	232,810	2,473,526
61	9	227,632	2,420,396	62	9	217,371	2,240,716
62	10	212,764	2,192,764	63	10	202,710	2,023,345
63	11	198,568	1,980,000	64	11	188,709	1,820,635
64	12	184,944	1,781,432	65	12	175,274	1,631,926
65	13	171,820	1,596,488	66	13	162,338	1,456,652
66	14	159,144	1,424,668	67	14	149,854	1,294,314
67	15	146,884	1,265,524	68	15	137,797	1,144,460
68	16	135,022	1,118,640	69	16	126,153	1,006,663
69	17	123,557	983,618	70	17	114,927	880,510
70	18	112,499	860,061	71	18	104,133	765,583
71	19	101,868	747,562	72	19	93,792·8	661,449·5
72	20	91,690·0	645,694·2	73	20	83,935·2	567,656·7
73	21	81,995·5	554,004·2	74	21	74,592·0	483,721·5
74	22	72,851·9	472,008·7	75	22	65,826·2	409,129·5
75	23	64,276·7	399,156·8	76	23	57,654·7	343,303·3
76	24	56,285·6	334,880·1	77	24	50,090·7	285,648·6
77	25	48,891·2	278,594·5	78	25	43,143·2	235,557·9
78	26	42,101·7	229,703·3	79	26	36,816·0	192,414·7
79	27	35,920·2	187,601·6	80	27	31,106·7	155,598·7
80	28	30,343·9	151,681·4	81	28	26,006·2	124,492·0
81	29	25,363·6	121,337·5	82	29	21,498·4	98,485·8
82	30	20,963·1	95,973·9	83	30	17,560·2	76,987·4
83	31	17,119·7	75,010·8	84	31	14,162·1	59,427·2
84	32	13,804·2	57,891·1	85	32	11,268·6	45,265·1
85	33	10,981·6	44,086·9	86	33	8,839·07	33,996·48
86	34	8,612·19	33,105·33	87	34	6,829·43	25,157·41
87	35	6,652·75	24,493·14	88	35	5,193·21	18,327·98
88	36	5,057·77	17,840·39	89	36	3,883·13	13,134·77
89	37	3,781·02	12,782·62	90	37	2,852·54	9,251·64
90	38	2,776·89	9,001·60	91	38	2,056·77	6,399·10
91	39	2,001·74	6,224·71	92	39	1,454·21	4,342·33
92	40	1,414·96	4,222·97	93	40	1,007·25	2,888·12
93	41	979·801	2,808·009	94	41	682·771	1,880·867
94	42	663·983	1,828·208	95	42	452·477	1,198·096
95	43	439·899	1,164·225	96	43	292·847	745·619
96	44	284·621	724·326	97	44	184·901	452·772
97	45	179·650	439·705	98	45	113·766	267·871
98	46	110·497	260·055	99	46	68·1337	154·1046
99	47	66·1529	149·5581	100	47	39·6724	85·9709
100	48	38·5046	83·4052	101	48	22·4323	46·2985
101	49	21·7635	44·9006	102	49	12·3025	23·8662
102	50	11·9307	23·1371	103	50	6·5359	11·5637
103	51	6·3356	11·2064	104	51	3·3594	5·0278
104	52	3·2550	4·8708	105	52	1·6684	1·6684
105	53	1·6158	1·6158				

JOINT LIVES:—Two Females.

Difference of Age 54 Years.

Difference of Age 55 Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 54 Years.**		x	y	**Difference of Age 55 Years.**	
54	0	474,391	4,885,396	55	0	458,236	4,608,560
55	1	390,689	4,411,005	56	1	376,881	4,150,324
56	2	348,359	4,020,316	57	2	335,579	3,773,443
57	3	318,956	3,671,957	58	3	306,801	3,437,864
58	4	294,991	3,353,001	59	4	283,298	3,131,063
59	5	274,206	3,058,010	60	5	262,884	2,847,765
60	6	255,588	2,783,804	61	6	244,572	2,584,881
61	7	238,441	2,528,216	62	7	227,693	2,340,309
62	8	222,316	2,289,775	63	8	211,810	2,112,616
63	9	207,099	2,067,459	64	9	196,816	1,900,806
64	10	192,645	1,860,360	65	10	182,572	1,703,990
65	11	178,841	1,667,715	66	11	168,971	1,521,418
66	12	165,600	1,488,874	67	12	155,934	1,352,447
67	13	152,861	1,323,274	68	13	143,404	1,196,513
68	14	140,584	1,170,413	69	14	131,350	1,053,109
69	15	128,746	1,029,829	70	15	119,754	921,759
70	16	117,342	901,083	71	16	108,616	802,005
71	17	106,380	783,741	72	17	97,947·4	693,388·7
72	18	95,878·0	677,360·5	73	18	87,769·1	595,441·3
73	19	85,860·2	581,482·5	74	19	78,107·7	507,672·2
74	20	76,356·5	495,622·3	75	20	68,992·9	429,564·5
75	21	67,398·5	419,265·8	76	21	60,454·9	360,571·6
76	22	59,044·6	351,867·3	77	22	52,545·9	300,116·7
77	23	51,309·0	292,822·7	78	23	45,276·7	247,570·8
78	24	44,201·6	241,513·7	79	24	38,652·3	202,294·1
79	25	37,726·8	197,312·1	80	25	32,671·2	163,641·8
80	26	31,882·5	159,585·3	81	26	27,324·8	130,970·6
81	27	26,659·9	127,702·8	82	27	22,597·2	103,645·8
82	28	22,043·0	101,042·9	83	28	18,464·9	81,048·6
83	29	18,008·6	78,999·9	84	29	14,897·5	62,583·7
84	30	14,526·6	60,991·3	85	30	11,858·3	47,686·2
85	31	11,560·8	46,464·7	86	31	9,305·30	35,827·85
86	32	9,070·09	34,903·90	87	32	7,192·55	26,522·55
87	33	7,009·35	25,833·81	88	33	5,471·57	19,330·00
88	34	5,331·13	18,824·46	89	34	4,093·00	13,858·43
89	35	3,987·11	13,493·33	90	35	3,008·02	9,765·43
90	36	2,929·57	9,506·22	91	36	2,169·85	6,757·41
91	37	2,112·80	6,576·65	92	37	1,534·89	4,587·56
92	38	1,494·19	4,463·85	93	38	1,063·65	3,052·67
93	39	1,035·19	2,969·66	94	39	721·371	1,989·024
94	40	701·898	1,934·465	95	40	478·314	1,267·653
95	41	465·280	1,232·567	96	41	309·743	789·339
96	42	301·220	767·287	97	42	195·685	479·596
97	43	190·246	466·067	98	43	120·476	283·911
98	44	117·091	275·821	99	44	72·1996	163·4351
99	45	70·1490	158·7298	100	45	42·0689	91·2355
100	46	40·8603	88·5808	101	46	23·8047	49·1666
101	47	23·1127	47·7205	102	47	13·0652	25·3619
102	48	12·6806	24·6078	103	48	6·9467	12·2967
103	49	6·7396	11·9272	104	49	3·5736	5·3500
104	50	3·4656	5·1876	105	50	1·7764	1·7764
105	51	1·7220	1·7220				

JOINT LIVES:—Two Females.

Difference of Age 56 Years.

Difference of Age 57* Years.

Ages		$D_{x,\,y}$	$N_{x,\,y}$	Ages		$D_{x,\,y}$	$N_{x,\,y}$
x	y	**Difference of Age 56 Years.**		x	y	**Difference of Age 57* Years.**	
56	0	442,041	4,338,383	57	0	425,824	4,075,066
57	1	363,055	3,896,342	58	1	349,219	3,649,242
58	2	322,790	3,533,287	59	2	309,995	3,300,023
59	3	294,640	3,210,497	60	3	282,474	2,990,028
60	4	271,600	2,915,857	61	4	259,895	2,707,554
61	5	251,554	2,644,257	62	5	240,214	2,447,659
62	6	233,548	2,392,703	63	6	222,511	2,207,445
63	7	216,933	2,159,155	64	7	206,163	1,984,934
64	8	201,294	1,942,222	65	8	190,769	1,778,771
65	9	186,525	1,740,928	66	9	176,231	1,588,002
66	10	172,496	1,554,403	67	10	162,427	1,411,771
67	11	159,108	1,381,907	68	11	149,264	1,249,344
68	12	146,287	1,222,799	69	12	136,678	1,100,080
69	13	133,985	1,076,512	70	13	124,627	963,402
70	14	122,176	942,527	71	14	113,090	838,775
71	15	110,848	820,351	72	15	102,061	725,685
72	16	100,006	709,503	73	16	91,547·6	623,623·9
73	17	89,663·4	609,497·2	74	17	81,567·5	532,076·3
74	18	79,844·2	519,833·8	75	18	72,144·3	450,508·8
75	19	70,575·2	439,989·6	76	19	63,304·3	378,364·5
76	20	61,885·0	369,414·4	77	20	55,073·8	315,060·2
77	21	53,801·1	307,529·4	78	21	47,475·8	259,986·4
78	22	46,368·2	253,728·3	79	22	40,546·9	212,510·6
79	23	39,592·4	207,360·1	80	23	34,286·8	171,963·7
80	24	33,472·7	167,767·7	81	24	28,687·7	137,676·9
81	25	28,000·7	134,295·0	82	25	23,733·6	108,989·2
82	26	23,160·7	106,294·3	83	26	19,401·1	85,255·6
83	27	18,929·0	83,133·6	84	27	15,658·9	65,854·5
84	28	15,274·9	64,204·6	85	28	12,469·2	50,195·6
85	29	12,161·1	48,929·7	86	29	9,788·46	37,726·39
86	30	9,544·75	36,768·62	87	30	7,568·95	27,937·93
87	31	7,379·07	27,223·87	88	31	5,760·18	20,368·98
88	32	5,614·58	19,844·80	89	32	4,310·62	14,608·80
89	33	4,200·82	14,230·22	90	33	3,169·26	10,298·18
90	34	3,087·91	10,029·40	91	34	2,287·12	7,128·92
91	35	2,227·96	6,941·49	92	35	1,618·55	4,841·80
92	36	1,576·34	4,713·53	93	36	1,122·13	3,223·25
93	37	1,092·62	3,137·19	94	37	761·391	2,101·123
94	38	741·200	2,044·569	95	38	505·096	1,339·732
95	39	491·584	1,303·369	96	39	327·255	834·636
96	40	318·420	811·785	97	40	206·859	507·381
97	41	201·222	493·365	98	41	127·427	300·522
98	42	123·920	292·143	99	42	76·4104	173·0950
99	43	74·2864	168·2227	100	43	44·5501	96·6846
100	44	43·2986	93·9363	101	44	25·2253	52·1345
101	45	24·5088	50·6377	102	45	13·8544	26·9092
102	46	13·4564	26·1289	103	46	7·3717	13·0548
103	47	7·1574	12·6725	104	47	3·7951	5·6831
104	48	3·6834	5·5151	105	48	1·8880	1·8880
105	49	1·8317	1·8317				

* **Note.**—The Columns $D_{x,\,y}$ and $N_{x,\,y}$ for **Difference of Age 58 Years** are printed on page 601; and the corresponding Columns for **Difference of Age 59–105 Years** will be found by reading the Tables backwards from p. 600 to p. 554.

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